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The New Detroit

The South's manufacturing renaissance comes with a heavy price

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❶ "Story's about the burgeoning auto parts industry in the South. There are serious safety concerns, and many workers are getting maimed—even killed."

"This is shocking. My complaints about working in an office suddenly seem utterly trivial."

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What Trump Got Right About The UN

By Clair MacDougall

United Nations peacekeeping missions are mired in bureaucratic waste and scandal

"The United Nations has such great potential but right now it is just a club for people to get together, talk and have a good time. So sad!" Donald Trump proclaimed over Twitter as 2016 came to a close.

That tweet sent proponents of the global institution into paroxysms of more tweeting and op-ed writing. The frenzy grew with the leak in late January of a draft executive order titled "Auditing and Reducing U.S. Funding of International Organizations." That document called for a 40 percent decrease in financial support to international organizations, including the UN. On March 16, Budget Director Mick Mulvaney confirmed that the Trump administration would be "reducing funding to the UN and to various foreign aid programs"–though specific numbers have yet to be announced.

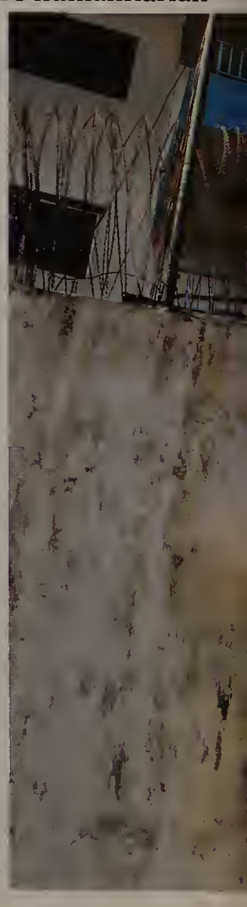
Many defenders of the UN all but predict global calamity should the U.S. take a big step back from the organization. However, that assumes both the superpower and the UN have been genuinely committed to addressing world poverty, government brutality, and armed conflict. The reality is the organization has been in a state of crisis that began long before Trump's entrance onto the world stage. His tweet expresses a view shared by those who support the UN's goal of promoting international peace yet see it failing to live up to its promises.

While the UN has been struggling to deliver on its agenda for more than a decade, only in recent years have the scandals epitomizing that failure spilled into the press–including peacekeepers being involved in sexual abuse cases in the Central African Republic and in the spreading of cholera in Haiti. The idealized images of blue-helmeted peacekeepers and aid workers handing out bags of rice to poor people are now things of the past.

"Accountability has been selective, and the focus has been on low-level people and not high-level people, who may also be culpable," says Louisa Lombard, an anthropologist and assistant professor at Yale, who's written a book on the violent conflict in the Central African Republic. "The head of the UN human-rights council knew about allegations of sexual abuse by peacekeepers in CAR but stayed silent. Why has there been no accounting for that? And don't even get me started on Haiti, small steps toward cholera accountability notwithstanding."

Peacekeeping missions, most of which are in Africa, cost billions of dollars to run, yet they lack financial and institutional transparency and often fail to protect victims of war and rebuild deeply divided societies. According to a report in *Foreign Policy*, UN bureaucrats have wasted half a billion dollars on administrative software programs that few know how to use. The bureaucracy is plagued by "colossal mismanagement" and lacks accountability, according to Anthony Banbury, a former UN assistant secretary-general for field support who led the organization's response to the Ebola epidemic that devastated West Africa in 2014 and 2015.

I covered that epidemic as a journalist based in Liberia, home to what was once one of the largest UN peacekeeping missions in the world. The juxtaposition of the hardship and poverty of the country against the perks and privileges of the UN staff is disturbing. I was among expatriates enjoying themselves in the evening at Monrovia's finest new restaurant, the Living Room, months after the regional epidemic ended. Outside, the city was dark but for the lights at the port and the tall UN compound beyond. We were perched atop Monrovia's grandest hotel, bathed in golden light, eating Thai food–with the option of Japanese–and sipping French wine, paying $7 for bottled water in a country where the majority of people live on less than a dollar a day. Whether we were humanitarian workers, journalists, members of the local elite, peacekeepers, spies, or mining magnates, we all shared in this thoughtless decadence.



In many countries, UN and foreign aid workers glide around in luminous white 4x4s and live in plush apartments with monthly rentals on a par with prices in London and New York. Comfortable and secure compounds are important when the situation is dire. But in Liberia, where expatriates enjoy a great deal of freedom, the UN and aid world within the city is "Funrovia," a well-oiled, climate-controlled zone of

swimming pools and deck chairs–surrounded by barbed wire. The hum of appliances is interrupted only when the generators are refueled.

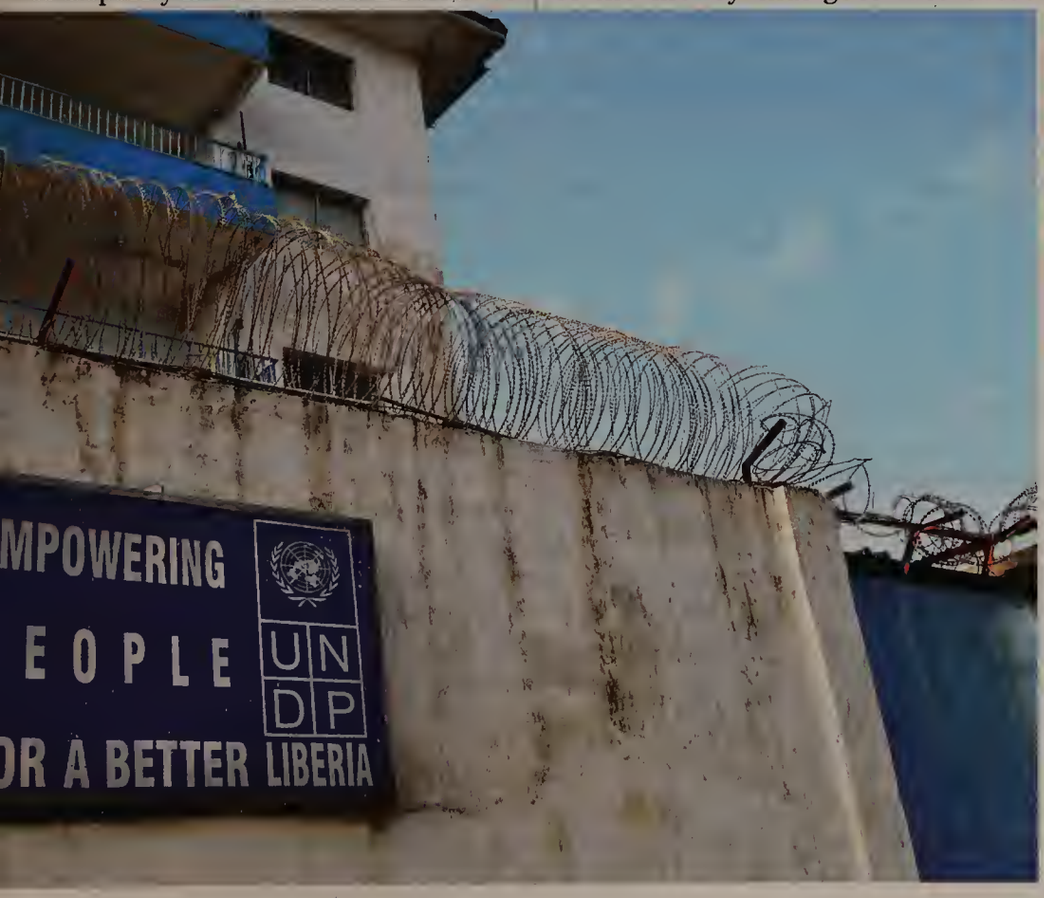
Outside, few Liberians have access to electricity, and running water is a dream. Expats pay monthly apartment rents that can reach more than 50 times the average monthly salary of $60 to $150 for Liberians with full-time employment, itself a rare situation. The security guards and maids who staff these residences must commute from the far outskirts of the capital, because they can no longer afford to live in the city where they work.

That's become the status quo since the peacekeeping mission arrived in Liberia in 2003, at the end of the country's civil war. Little has improved in more than a decade. Electricity is scarce and the most expensive in the world. Only the most privileged of Liberians have water running through their taps; the rest are left to haul it from rivers, wells, and pumps. Much of the country is underemployed. The few who had full-time jobs in iron ore mines and rubber plantations–Liberia's primary exports–have been laid off because of the decline of the global commodities market.

The meal I shared with two friends at the Monrovia hotel cost 127 times more than the rice and soup most Liberians buy from a cookshop. And that kind of disparity isn't limited to Liberia. We could have been in almost any post-conflict country in the world with a UN peacekeeping mission. These missions cost billions of dollars to run, are monstrously bureaucratic, and, once launched, take on a life of their own, refusing to end as their expatriate bureaucracies suck in funding. Similar missions–in the Democratic Republic of the Congo, Haiti, and the Republic of South Sudan, for example–have been called failures, and yet that hasn't resulted in their reform or withdrawal.

At its height, the United Nations Mission in Liberia played host to 15,000 troops; it's spent more than $7 billion in a nation of 4 million people. Liberia has been lauded as a success. Most of the mission's peacekeepers will depart a few months after presidential elections in October, handing responsibility for security back to the Liberian government. But the mission's legacy remains murky. Many diplomatic officials and observers, including the former head of mission, Karin Landgren, have expressed concerns that the economic inequality and culture of impunity that led to Liberia's civil war, which lasted from 1989 to 2003 and claimed at least 250,000 lives, haven't changed.

The UN as an institution rarely considers the impact of its peacekeeping missions or "interventions" on local economies. Nor does it measure the effects of its presence or work. Most of the money that goes into these



TOMMY TRENCHARD/ALAMY

The loss of American donor dollars may finally force reforms on the organization

missions is spent on foreign contractors, consultants, and staff, with only a small portion trickling down to local businesses. In nations where structural inequality and the plundering of natural resources remain key causes of conflict, the UN does little to stimulate the economy or buy from local suppliers or traders.

It's the same story, be it Goma in the Democratic Republic of the Congo, Juba in South Sudan, or Bamako in Mali, says Kathleen Jennings, a researcher who's studying the economic impact of peacekeeping missions. "The danger is that this [kind of] economy is essentially locking in hierarchies that were underlying the conflict in the first place, that is the people who had the most at the end of the war," she says. Jennings adds that locals often see the UN as fundamentally corrupt and ineffective.

The UN's wastefulness and sclerosis doesn't mean the U.S. can claim some moral high ground. Washington, like every major power, has always played its own games within the organization. The Security Council has long been a cynical playground for the U.S., Russia, China, and others as they pursue their own interests. Furthermore, Trump's emerging policies regarding refugees, Muslims, and immigrants are likely to affect global stability, as is the possibility that his administration could flout more international agreements and conventions than the U.S. already does.

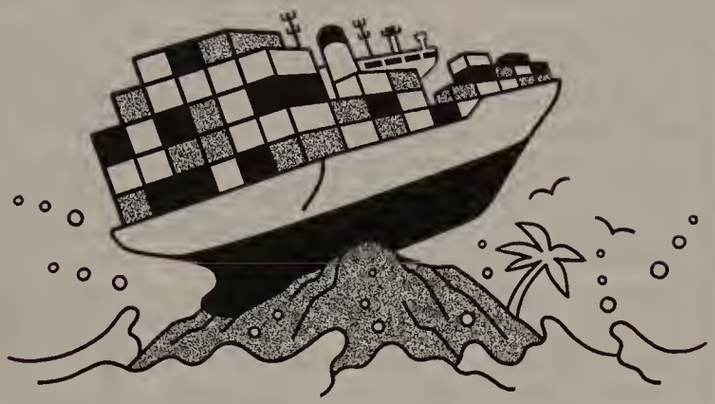
But that means it's even more imperative for the UN to find a way to restore its floundering raison d'être–because it may have to pursue its agenda without the same amount of U.S. donor dollars. At the moment, Washington contributes about 22 percent of the UN's regular budget. In addition, it pays almost 30 percent of the organization's peacekeeping costs. U.S. Ambassador to the UN Nikki Haley says she intends to work with Secretary-General António Guterres "on the efficiencies that are needed in peacekeeping reform, which we spent a ton of money on." Perhaps a substantial defunding may finally force the UN to reform. B

MacDougall is a journalist based in Monrovia, Liberia.

To read Leonid Bershidsky on the James Comey hearing and Matthew A. Winkler on America's sanctuary cities, go to Bloombergview.com

Trump's Reckless Threat to World Trade

Without new global agreements, international competition gets nibbled away



Presumably at the insistence of the U.S. administration, the latest statement from the Group of 20 big economies conspicuously dropped the standard promise to "avoid all forms of protectionism." It's worth pausing to understand why that promise was ever worth making, and honoring.

The reason is surely not that governments always keep their word. For years they've been backsliding on their ritual commitment to keep markets open–and partly for that reason, the prospects for world trade were already looking poor. But those prospects will be so much worse if governments, led by the U.S., come to regard protectionism as a policy to be openly embraced.

In the recovery from the recent global recession, the volume of trade has grown more slowly than it should. During the past four years, the slowdown has been pronounced. Disentangling the causes isn't easy. Weak investment demand because of the severity of the economic slump is one factor. But trade policy is another. Since 2012 protectionism has been quietly ratcheting up.

As always, traditional measures such as state aid, export incentives, and public procurement are being used to protect domestic producers. In addition, governments everywhere have been using local-content requirements to discriminate against foreign competitors. According to one analysis, the U.S. has led this post-2008 trend, even with an avowedly pro-trade administration in charge.

It's a cliché of trade policy that you need to keep moving to stand still, and the experience of recent years proves the point. Without big agreements such as the Trans-Pacific Partnership–strongly championed by former President Obama but rejected by Congress–international competition gets nibbled away. Instead of this mildly debilitating process of attrition, President Trump contemplates a frontal assault on liberal trade.

Although the basic case for free trade has gone out of academic fashion lately, it remains as strong and simple as ever. Competition is the wellspring of prosperity–and liberal trade promotes competition. Forcing producers to innovate, specialize, and compete makes economies more efficient. Inhibit that process, and in the end, in the aggregate, people are worse off.

"In the aggregate" does matter: Trade involves winners and losers–as do, by the way, technological progress and purely domestic competition. In all cases, the wisest remedy is to support the workers who suffer the costs of this dislocation, especially with retraining and relocation. The alternative is a vicious circle of diminished competition, subpar growth, and stagnant living standards.

Changes in rhetoric are one thing, changes in policy another–but if deeds follow words, the world is in trouble. If Trump leads governments toward outright protectionism, he will do untold damage both to the U.S. and the global economy.

The Immigration Policy America Needs

Canada shows the U.S. the way forward. There shouldn't be an excuse to retrench

In early March, President Trump praised the skills-based immigration system of Canada. It's worthy of the accolade: In 1967, Canada became the first nation to use a points system, grading applicants to its Federal Skilled Worker Program on six factors: work experience, education, language ability, age, arranged employment, and a more subjective measure of "adaptability." To be eligible for a permanent resident visa, an applicant must accumulate enough points in the various categories to "pass."

The result is that about 60 percent of permanent residents admitted to Canada enter for economic reasons. Studies show skilled immigrants increase productivity, create jobs, and spark entrepreneurship. One-quarter of technology and engineering companies established in the U.S. from 1995 to 2005 had at least one immigrant founder.

U.S. immigration law currently values family ties over skills. A points system similar to Canada's would reverse that preference. Republican Senators Tom Cotton of Arkansas and David Perdue of Georgia have introduced legislation to accomplish such a switch, scaling back family-based migration to the spouses and minor children of U.S. citizens and legal permanent residents.

The bill, however, would also drastically reduce immigration overall. Recalibrating U.S. policy to prioritize high skills makes sense, but cutting overall immigration levels in half is too high a price to pay. To keep their skills pipeline stocked, both Canada and Australia welcome a higher percentage of immigrants based on national population than the U.S. does–more than twice as high, in fact.

U.S. immigration policy affords too little consideration of economic goals. A points system could rectify that mistake. But if it proves to be a ruse for indiscriminately clamping down on immigration, the U.S. will fall behind in the global competition for talent. B

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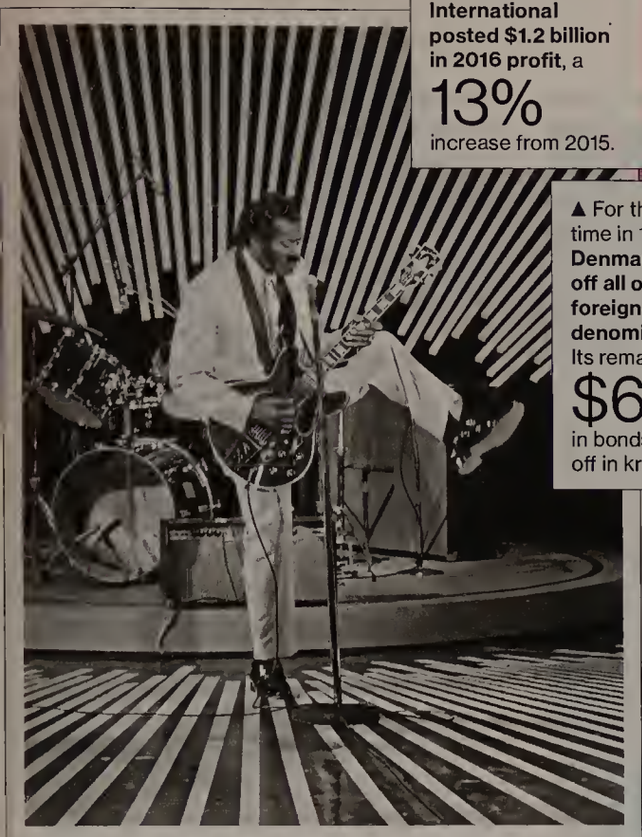
Movers

By Kyle Stock

▲ People are still hot for Birkin bags. Bucking tough conditions for luxury brands, **Hermès International posted $1.2 billion in 2016 profit**, a

13%

increase from 2015.



▲ **Sales of Chuck Berry records spiked 900-fold** after the legendary rocker died on March 18 at age 90. His final album, *Chuck*, drops on March 24.

▲ For the first time in 183 years, **Denmark paid off all of its foreign-currency-denominated debt**. Its remaining

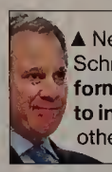
$67b

in bonds will be paid off in kroner.

▲ Kenya is offering **the world's first bond sold only via mobile devices**. With denominations as low as 3,000 shillings ($29), the debt is meant to be easy to buy or sell.

$19t

▲ **The economic boost the world will receive by 2050 from efforts to slow climate change**, according to a report from the International Renewable Energy Agency.



▲ New York Attorney General Eric Schneiderman has hired **an assistant to former U.S. Attorney Preet Bharara to investigate President Trump** and others for public corruption.

▲ Disney's ***Beauty and the Beast* set a record for March ticket sales** during its opening weekend, bringing in

$411m

worldwide. The film is on track to match or beat *Frozen*'s $1.3 billion box-office haul.

▲ **South Korea approved tax breaks for film and TV production**, a move that could create as many as 6,400 jobs. The country's entertainment industry has struggled under a Chinese ban on Korean imports.

▲ Vodafone will become India's top mobile operator once it completes a $23 billion merger with Idea Cellular, the country's No. 3. **Together, the companies have 400 million customers in India.**

▲ In its biggest-ever product push, **BMW says it will spend**

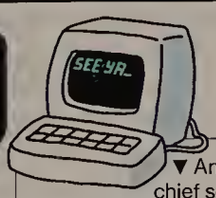
$10.8b

on 40 new models in the next two years. The carmaker needs to catch up to Mercedes in SUVs, in particular.

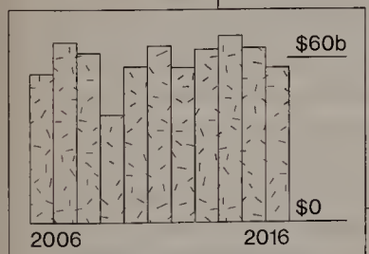
Ups

▲ According to an annual report that measures socioeconomic factors, **Norway is the world's happiest country**. The U.S. is No. 14.

Downs



▼ Andrew Ng, the chief scientist helping drive Baidu's push into artificial intelligence, is quitting the Chinese search giant. **Ng's departure in late April will put at risk Baidu's AI efforts**, which are central to its plans to diversify the business and reboot growth.



▼ **Global art sales last year slipped 11 percent**, to $56.6 billion, according to data from UBS and Art Basel. The market was particularly bad for pieces priced $1 million and up.

▼ Sears Holdings said in a filing there was "substantial doubt" about its ability to continue doing business. On March 22, **shares for the 131-year-old company fell as much as**

15%

▼ AT&T halted non-search-ad spending with Google, the latest company to do so out of concern its ads might run beside objectionable videos on YouTube. **Google has said it will work harder to remove hateful or offensive material** and to give advertisers more control over where spots appear.

▼ **Nike shares slid as much as 6.5 percent to $54.23 on March 22**, the biggest intraday decline since Aug. 24, 2015. They had already dropped 10 percent in the past year through the close on March 21.

▼ **Uber President Jeff Jones quit after less than a year on the job.** He was second in command to CEO Travis Kalanick. The company is still searching for a chief operating officer to help Kalanick manage the company.

▼ **Deutsche Bank slashed 2016 bonuses by**

80%

as it suffered its second consecutive full-year loss.

"American capitalism has brought more benefits to more people than any other system in any part of the world at any time in history."

▼ **David Rockefeller, billionaire philanthropist** and former chairman and CEO of Chase Manhattan Bank, who died on March 20 at 101.

China's Numbers Man

▶ Gan Li's statistics on the economy just won't toe the party line

▶ "What he found fundamentally changes the way we think"

Economist Gan Li and his researchers at Chengdu's Southwestern University of Finance and Economics are gearing up for their national survey of Chinese households, which begins in early July. The aim of the biennial census is to measure the wealth of China's 1.4 billion people—how much they earn, how many apartments they own, and how much land they have and how they use it. Bankers, economic analysts, property developers, and policymakers are eager to see what the survey will reveal.

The now much anticipated project almost suffered a premature death in 2012 after it exposed how Chinese society had become one of the most unequal in the world. Gan's survey showed that China's Gini coefficient, a measure of income inequality, had reached 0.61, well above the 0.4 level widely considered destabilizing by economists. The top 1 percent held more than one-quarter of China's wealth, while 430 million Chinese struggled day-to-day.

Less than 24 hours after Gan released the news, six cadres from the National Bureau of Statistics descended on his Survey and Research Center for China Household Finance. They demanded the data. The economist wondered whether he'd be shut down. His fears proved unfounded: "They found no errors," he says. "A few days later, someone told me we should be OK."

Economic indicators have long had a special role in China. During the Mao era, the statistics bureau was an arm of the state planning commission, and it focused on counting widgets made by state-owned factories. Other parts of the economy were largely ignored. "Statistics were never about serving the public. They were—and still are—for the purposes of serving the government bureaucracy," says Carsten Holz, an expert on Chinese statistics at the Hong Kong University of Science and Technology. He says the director of the statistics bureau also serves as its party chief, adding to the political pressures.

Gan, 50, has been on a mission to depoliticize statistics. Along with the flagship household survey to which the People's Bank of China research department provides logistical support, the

Palestine wants your tourist dollars (barbed-wire views included) 14

center carries out smaller projects. "The problem is not just the gray areas," he says. "In China, lots of things are completely dark."

The center, which usually has a staff of 65, swells in size for its nationwide census. Some 2,500 Southwestern University students undergo two weeks of training to learn the basics of interviewing. Then they talk to some 40,000 families, often going to their home province, where they understand the local dialect, and spending nights doubled up in cheap hotel rooms. The students ask about annual wages and how much jewelry or livestock a family has. "After finishing a household, we had to walk a long way through rice fields to get to the next household," says Fan Lingyun, who worked on the 2015 survey. "Sometimes we would run into village dogs and have to turn around and find another way to go."

Students carry a Huawei tablet loaded with the survey questionnaire. The tablet is connected by GPS to Gan and his team in Chengdu. Other indispensable items include a calculator to help families figure out their finances, bottled water, and a flashlight to navigate dark apartment building lobbies and village alleyways. The students are also trained in basic first aid in case a surveyor falls ill.

Born and raised in Chengdu, Gan entered Beijing's elite Tsinghua University's department of economics and management when he was 15. He credits his interest in economics and public policy—and that of many of his classmates'—to a then-popular novel, *Manager Chao Assumes Office*. "It turned out we all had read the same book," he says. "It is the story of how someone becomes manager of a losing factory, but after installing new policies and new incentives, the factory becomes revived." Gan eventually received a doctorate in economics from the University of California at Berkeley, and he now serves as professor at Southwestern University in China and at Texas A&M University in College Station.

After his run-in with the authorities in 2012, Gan hasn't released an updated Gini coefficient, but he still sees income inequality as the biggest obstacle to China's development. Even as the country has built up new social welfare programs, including a monthly subsidy for the poorest, household consumption has not grown much, because most Chinese still have no extra money to spend: The nation's high savings rate is produced by the wealthy few. Gan wants more redistribution of income from the rich to the poor through property and inheritance taxes, neither of which exist in China. "What he found fundamentally changes the way we think about China's economy," says Tom Orlik, chief Asia economist at Bloomberg Intelligence. "China doesn't face the challenge of building a welfare state but ensuring more equal distribution of wealth and income, which is much harder."

Gan's research on China's housing sector has also made waves. He figures that 70 percent of total household wealth is made up of the value of apartments. About 50 million already-sold units sit empty, much more than some investment banks had estimated. (The government doesn't release national data on empty apartments.) China has a vacancy rate of 18 percent, compared with 13 percent in the U.S., Gan says.

Although his data were at first contested by property developers, now they are more widely accepted. That's one reason officials are reducing housing inventory. "With policymakers mainly in Beijing, a city with rising housing prices, they assumed that China needed more apartments," Gan says. "Now the policy has almost 180 degrees turned."

27%

Share of wealth held by the top 1 percent in China

Gan's reputation has strengthened his relationship with officials. When some suspicious villagers seized his students' computers during a survey in 2013, Gan flew to Beijing and met with a department director at the statistics bureau to ask for help. After confirming that the survey was legal, the bureau got the equipment back. "I was told that a senior official at the People's Bank also put out the word that our work is good and should be supported," Gan says.

Gan has his detractors. His Gini coefficient estimate of 0.61 was unbelievably high, with the real figure now closer to 0.45, says Li Shi, an economist at Beijing Normal University, who uses data the statistics bureau collects. Gan's survey sample is skewed by focusing on rich urban areas and excessively poor villages, Beijing Normal's Li says.

For the 2017 census, Gan wants to gather more information on the movements of migrant workers and on the fast-growing rural land market. There are always more questions to ask.

—Dexter Roberts, with Xiaoqing Pi

The bottom line According to economist Gan Li, income inequality is the most pressing economic problem in China.

SOUTHWESTERN UNIVERSITY OF FINANCE AND ECONOMICS; CHINESE WEALTH AND INCOME FIGURES AS OF 2015

Education

Indians Reconsider Life in America

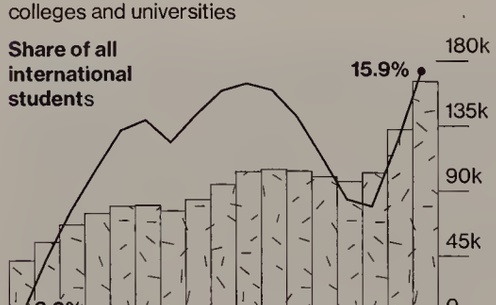
- **Students headed to U.S. schools fear they may not get a work visa**
- **"Are we right in investing in a U.S. degree at this time?"**

Rahul Lachhani, a technology analyst at Credit Suisse Group AG in Mumbai, is on the verge of realizing his dream of pursuing a graduate degree in the U.S. The University of Southern California Viterbi School of Engineering has accepted him into its computer science graduate program. But the Trump administration's strident anti-immigration stance has him worried. "After so many years of hard work, my friends and I are now questioning—are we right in investing in a U.S. degree at this time?" he says.

For decades, the U.S. has lured thousands of foreign students who've earned graduate degrees ▶

Closing the Door?

Number of students from India at American colleges and universities



DATA: INSTITUTE OF INTERNATIONAL EDUCATION

◀ in engineering or mathematics and been quickly hired by the likes of **Google Inc.** and **Microsoft Corp.** Now the Trump administration is trying to slash immigrant visas, while Republican and Democrat lawmakers are introducing bills to curb the number of work visas. Recent violent attacks against Indians—several fatal—have raised the specter of physical danger among Indians who have fantasies of a life in the U.S.

Lachhani is among the two dozen people attending a meeting in Mumbai for those admitted to Viterbi. "We want the best and brightest to come to USC," Sudha Kumar, director of the university's India office, tells them. What should have been a routine session to talk up the virtues of a Viterbi education and share tips on living costs and campus jobs turns into a sort of group therapy where the attendees vent their fears. "Many students are thinking twice because of the violence," says Stuti Patel, one of the attendees.

Of particular concern to those at the meeting are leaked draft orders that herald changes to the H-1B visa program, which has allowed thousands of Indians like Lachhani to get high-paying jobs in the U.S. after graduating. Indians received almost 120,000 H-1B visas in 2015, 70 percent of the total issued.

Kumar attempts to soothe the attendees. "We are waiting and watching what's going to happen on the visa front, but I can tell you that American universities need international students and American companies want foreign engineers," she says.

The job outlook in the U.S. is especially crucial for students who'll be borrowing heavily. Tuition at Viterbi is about $50,000 to earn a master's degree. "I will graduate with heavy debt, and I worry about repaying my student debt if H-1B visas are not available for finding jobs in the U.S.," says Gauri Joshi, a top telecommunications engineering student at a local school.

Parents of potential Viterbi students are anxiously checking the news. The murder of a young Indian in Kansas and the ensuing FBI hate crime investigation into the triple shooting dominated newspaper headlines and prime-time TV in India for days. The father of an Indian who survived appealed to his countrymen not to send their children to study in America. "My parents call every morning with the latest Trump policy headlines or the newest episode of violence, but I tell them that California is safe," says 21-year-old Shreya Jain, who's about to graduate from a local college. The USC campus is friendly, Kumar tells the group, and Los Angeles is as safe as any big city in India. "The president of the university is an immigrant," she says. "The dean of the engineering school is an immigrant. Don't let the news of violence and the actions of a few fringe groups keep you from getting a great USC education." Then, to nervous laughter, she adds, "We hope President Trump cooperates with us." —*Saritha Rai*

The bottom line Indians who normally are eager to study in the U.S. are having doubts because of the anti-immigrant steps Trump has taken.

Digits

8.7%

Mexico's peso gain against the dollar this year. The peso is close to recovering the value it had before Donald Trump's election as president.

Tourism

Room With a View (of a Wall and Barbed Wire)

- **Palestinians want tourists, but Israeli occupation makes it hard**
- **"An odd sense of oppression" hangs over Bethlehem**

And now a message from the Palestinian Authority: Walk in the footsteps of Jesus, enjoy some savory hummus and stuffed grape leaves, and please, please, please spend the night. If you squint, you might not see the watchtowers, barbed wire, and rifle-toting Israeli soldiers.

The Palestinian government is making a push to attract tourists to Bethlehem, Jericho, Hebron, and other historic religious sites—going so far as to call Jesus "the first Palestinian." While tourism to Israel has steadily increased in recent years, Palestinian-controlled lands—which include many of the major Biblical sites—have seen scant benefit as Israel maintains a tight military grip over the West Bank.

Sure, there's an annual rush to Bethlehem at Christmas. But even then, most visitors come on day trips to check out Manger Square and the Church of the Nativity, spending little time—or cash. Archaeological jewels such as the Khirbet Bal'ama water tunnel near Jenin and the Sebastia Roman colonnade outside Nablus get scarce traffic. And the new, white-marble Yasser Arafat museum in Ramallah? On a recent weekday afternoon, it had just three visitors. Although political tensions make it tough to attract tourists, Saeb Erekat, secretary-general of the Palestine Liberation Organization, envisions sunbathing and spas on

the Dead Sea, bike trails through the Jordan Valley, and Christians flocking to Bethlehem year-round. "If we had an independent state, it would be magnificent," he says.

Tourism in the Palestinian territories rebounded slightly in 2016, to 2.4 million foreign visitors, up from 2.2 million the previous year, but below the 2.5 million in 2014, government data show. Few, though, remain for the night. Palestinian hotels registered 906,000 stays by foreign visitors in 2016, down from 1.1 million in 2014. In Israel, by contrast, foreigners logged 8.5 million nights in hotels last year. While government figures show Israel got more than $6 billion from tourism in 2016, the Palestinian lands registered less than $1.1 billion in 2014, the most recent data available.

Just as problematic for the Palestinians, the vast majority of visitors arrive via Israel, so Israeli tour operators and hotels get first crack at serving them. Responding to frustrated hoteliers, the PLO issued a report last year on the "annexation of tourism," charging that Israelis had rebranded some of the most popular West Bank sites as being in the "Holy Land" to obscure their Palestinian identity. Yossi Fatael, head of the Israel Incoming Tour Operators Association, barely disputes the complaint. "All tourists go through our system," he says. Palestinian areas "are an extension of our product."

The Palestinians' ambitions, though, run smack into an infrastructure nightmare. While Jerusalem and surrounding Israeli-controlled towns have European-quality roads, restaurants, and hotels, beyond the walls and fences in the West Bank the potholes grow, and the accommodations suffer. Bethlehem's Jacir Palace, the only five-star hotel in the area, boasts a grand lobby in the century-old residence of a former mayor, but the paint is peeling, the carpets are worn, and the heat doesn't always work. While Jerusalem's Old City is a dense web of narrow lanes dating back millennia, with historic sites such as the Western Wall and the Church of the Holy Sepulchre (where Jesus is said to have risen), Bethlehem has little to offer strolling tourists. Manger Square is a barren expanse surrounded by souvenir shops selling cheap olive wood renderings of the Madonna and Child, pearl-inlaid boxes, and T-shirts saying, "I Love Palestine." Beyond the square, the small old town can be explored in an hour or two, and it pretty much shuts down at sunset. "An odd sense of oppression" pervades the city, says Mary Starkey, a 62-year-old retiree visiting from Britain, after passing through an Israeli checkpoint.

Starkey's view may have been colored by her lodging: the **Walled Off Hotel**, which advertises "floor-to-ceiling views of graffiti-strewn concrete." Recently opened by the London street artist Banksy, the three-story guesthouse stands across a narrow alleyway from a 26-foot-high wall that divides much of the West Bank from areas settled by Jews. "We hope to raise international awareness of how ugly this wall is and in that way contribute to peace," says hotel manager Wissam Salsaa.

Israel has done a better job of nurturing tourism in a conflict zone. Tel Aviv has cultivated a young, hip vibe with cafe-lined boulevards and surfing on its beaches. There are a growing number of ecotourism ventures in the southern desert and wine trails in the Galilee. And visitors flocking to Jerusalem don't seem put off by security measures such as armed guards restricting entrance to the Dome of the Rock or off-duty Israeli soldiers roaming the streets with machine guns. "I had mixed feelings when I passed through the checkpoints," says Leonardo Governatori, a 40-year-old engineer from Italy visiting Bethlehem. "But it's an experience to see how people live here."

—Jonathan Ferziger and Fadwa Hodali

The bottom line While tourism to Israel has surged recently, the West Bank hasn't benefited much. The Palestinian Authority aims to change that.

B **Edited by Christopher Power**
Bloomberg.com

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Satisfaction Guarantee	YES	NO	NO	NO	NO	NO

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Small is beautiful to the cosmetics giants 18

There's something rotten in Brazil 20

March 27 — April 2, 2017

Everything Is Fine at Cathay Pacific

▶ **Fast-growing Chinese rivals have eroded its longtime dominance of travel to the mainland**

▶ **"For Cathay, there's very little leeway for adjustment. They're in a dead end"**

For decades, **Cathay Pacific Airways Ltd.**'s status as Hong Kong's flagship carrier fueled its growth until it became the largest international airline in Asia. But the dramatic expansion of air traffic directly in and out of business centers across China—bypassing Hong Kong—has chipped away at Cathay's once-lucrative role as the main conduit for travel to the mainland. Worse, China's decision to build its three state-controlled airlines into major global carriers presents Cathay with large, lower-cost rivals not only for flights to the mainland, but also for long-haul travel to a host of destinations globally.

The impact of these developments became all too clear on March 15, when Cathay reported its first annual loss since 2008, skipped paying a second-half dividend to shareholders, and warned that 2017 may not be any better.

"Cathay and Hong Kong have been dwarfed, completely overwhelmed, by China's growth," says Shukor Yusof, founder of aviation consulting firm Endau Analytics in Malaysia. "China doesn't need Hong Kong as a gateway. Its position has become a lot less important than 10 years ago."

The airline lost HK$575 million ($74 million) in 2016, as sales dropped 9.4 percent, to HK$92.8 billion. A key measure of profitability, passenger yields—the money earned from flying a traveler 1 kilometer—dropped 9.2 percent last year, to HK54.1¢. Cargo yield fared even worse, falling 16 percent, to HK$1.59. Cathay loses money on its passenger service because its seat costs per kilometer are more than their corresponding revenue.

In response, Cathay has announced a three-year "corporate transformation" plan to reduce costs as much as 3 percent. Chief Executive Officer Ivan Chu wants to increase passenger capacity as much as 5 percent a year by, among other things, adding nonstop flights to new markets. "We've got to become better, lower-cost, more agile in terms of how we approach the market," Chairman John Slosar told reporters on March 15.

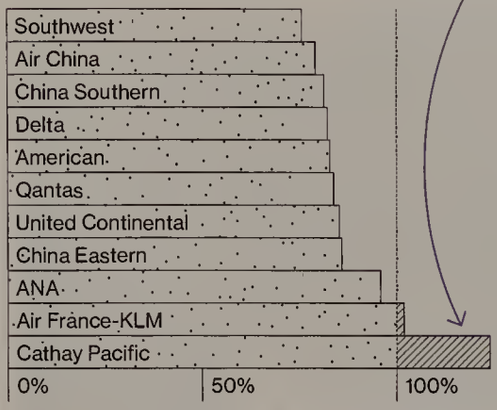
The airline has set a target of saving 30 percent in employee costs at its Hong Kong headquarters, primarily through changes to middle to senior management that will be announced by June, Cathay said in an emailed statement. "It is clear that there is a need for an organizational structure that will allow the Cathay Pacific Group to succeed," the airline said. "We need a leaner, simpler structure that is driven by real insights into our customers and their needs, one that will allow us to respond quickly to change."

For Cathay, controlling labor costs is crucial. While fuel is typically the biggest expense for an Asian carrier, Cathay's annual employee costs of HK$19.8 billion slightly exceeded its gross fuel expenditures in 2016. And its annual revenue per worker was ▶

To make money on passenger operations, Cathay would need to sell more seats than it has

Worst Class

Average percentage of available seats needed to be sold to turn a profit



BREAKEVEN LOAD FACTOR. LATEST FISCAL YEAR FIGURES. DATA: BLOOMBERG GADFLY

◀ $353,372, vs. $473,270 at **Delta Air Lines**, $447,640 at **Singapore Airlines**, and $429,100 at **Qantas Airways**, according to data compiled by Bloomberg.

Cathay finds it harder to contain staffing expenses than many other Asian carriers because its unions are stronger. Will Horton, an analyst at CAPA Centre for Aviation in Hong Kong, wrote in an email that the company's 30 percent cost reduction target for headquarters staff seems to be a clear message: "Cathay's restructuring starts at the top and all employees are in this together if they are to secure Cathay's future. That means pilots then need to come to the table, too."

Shukor, of Endau Analytics, says taming pilot pay could be especially important. "Cathay pilots are the highest-paid in Asia, and their pay would be comparable to those flying European and U.S. airlines," he says. But attempts to cut costs "will face strong resistance from employees," so for management, "how much pain they are willing to take is the real question."

Cathay is being hurt by the booming aviation market on the mainland. Breakneck economic growth and rising incomes are creating more first-time fliers who want to see the world, and the Communist Party leadership is adding capacity to get them there. China plans to build more than 50 airports by 2020 to accommodate the crowds, raising the nation's total to 260. The government wants to build six airport clusters nationwide and elevate airports in Beijing, Guangzhou, and Shanghai to international hubs.

The combined number of Chinese passenger and cargo airlines rose 28 percent in just five years, to 55. The number of planes in the air more than tripled in a decade, to 2,650, according to China's *Civil Aviation Industry Statistics Report*. One way mainland carriers are filling all those seats: lowering fares and adding service from less-served cities such as Chengdu and Xi'an.

"Chinese carriers are giving better prices," says Mohshin Aziz, an analyst at Maybank Investment Bank Bhd. in Kuala Lumpur. "China's No. 1 priority is to get as many international flights [as possible] for the next five or so years."

The result is new competition, says Su Baoliang, an analyst at Sinolink Securities Co. "Hong Kong used to be the gateway to Asia, but now you have three hubs rising from the Chinese mainland," he says. "For Cathay, there's very little leeway for adjustment. They're in a dead end." Belt-tightening won't address the root cause of Hong Kong airlines' problem, says UBS Group AG analyst Eric Lin. "People aren't coming to Hong Kong to take flights," he says. "Cutting cost is something you do to keep yourself alive in a bad environment. The question now is, given Hong Kong's diminishing role as a transfer hub, does it still need so much capacity and such a big carrier?"

Cathay has certainly been trying. The airline, in which **Air China Ltd.** holds an almost 30 percent stake, has been widening the discounts for its premium cabin seats as it competes against such rivals as **China Eastern Airlines Corp.**, which operates from a big hub in the financial center of Shanghai. But its prices are still higher.

An economy-class ticket on Cathay's direct Hong Kong-New York flight in mid-April costs about $1,012, while China Eastern is offering tickets for $806 originating from Shenzhen (only 11 miles away, across the border in China) to New York via Shanghai. And Chinese carriers aren't the only ones giving Cathay fare headaches. **Korean Air Lines Co.** flies between Hong Kong and New York for less than $750 via its hub in Seoul.

"The bar for air travel is getting lower as cheap fares are driving growth in the economy class," says Geoffrey Cheng, an analyst at Bocom International Holdings Co. "For those who still travel in the premium cabin, they increasingly favor transfer flights" on lower-fare carriers to stretch their corporate travel budgets, he says.

Slosar, Cathay's chairman, is keeping a positive tone when discussing the carrier's challenges. "It's easy to focus on the downside of more competition," he says. "The upside is, this is where the travel markets are exploding. There's a lot of travel going to be available in Asia over the next generation. We just need to figure out how we're going to position ourselves to take best advantage of it." —*Kyunghee Park and Dong Lyu*

The bottom line Cathay Pacific grew fat ferrying travelers to China. Now the growth of other mainland carriers is clouding its future.

Personal Care

In Style: Beauty Brands With Social Media Cred

- **Cosmetics companies are buying tiny brands with online followings**
- **"Authenticity is what makes it work"**

More than half a century ago, Revlon founder Charles Revson famously described the true business of cosmetics makers: "We sell hope." Today the same could be said about what the large, established beauty houses see in small, social media-driven makeup companies. The prospect of wooing the millions of millennials who base their makeup and skin-care purchase decisions on online likes, follows, and reviews from influencers has sparked a feeding frenzy for small, hip brands. The 52 acquisitions in the beauty and personal-care industry last year were the most in a decade, and some of the hottest targets were private brands with massive social media fan bases, according to investment bank Financo LLC.

If there's any slowdown this year, it'll only be because demand for buyout candidates outstrips supply, says Colin Welch, a managing director at TSG Consumer Partners LLC, which bought a minority stake in a little line called IT Cosmetics in 2012. The company reached sales of $182 million last year, when TSG orchestrated its sale to **L'Oréal SA** for $1.2 billion.

"There's a lot of capital chasing investments," says Welch.

Big cosmetics companies used to turn up their noses at any acquisition with less than $100 million in annual sales, says Vennette Ho, a managing director at Financo. Now there's practically no bottom because revenue can climb fast if a line suddenly catches digital fire. That's because millennials and teens are so receptive to social media tips on what to buy, and because word-of-mouth is the primary factor behind as much as 50 percent of their purchasing decisions, according to McKinsey & Co.

These days, "consumers are gravitating to smaller brands with innovation," Ho says. They also want what's called "authenticity," which roughly translates into an interesting backstory from a photogenic founder who applies the personal touch. At **Huda Beauty**, founder Huda Kattan, an Iraqi American who lives in Dubai, stars in video tutorials demonstrating how to use her latest products; she also answers questions from customers on her blog, beginning her responses with "Hey honey." Her Instagram followers exceed 18 million.

"Authenticity is what makes it work," says Claudia Soare, president of **Anastasia Beverly Hills**, the celebrity salon empire her mother, Anastasia Soare, founded in 1997. Started in a rented room in Los Angeles, Anastasia now operates Brow Studios in 80 Nordstrom stores nationwide.

Anastasia Beverly Hills—a favorite of many A-listers, including Kim Kardashian—saw its U.S. online sales grow by an industry-leading 150 percent in 2016. What's more, it's No. 1 in social media value in the sector, as calculated by Tribe Dynamics, an internet branding company that tracks tweets and retweets, YouTube hits, and more to determine the coolest of the cool. One measure is Instagram followers: Anastasia has more than 13 million.

That performance has put the company on the wish lists of many mergers-and-acquisitions professionals. But Anastasia Soare is having none of it, saying she regularly rebuffs suitors and doesn't plan to stop. "We don't need to answer to anybody," she says. One reason for the aversion to selling out: "The minute you introduce a financial backer," says daughter Claudia, "we'll never be able to deliver the same kind of feeling. The original brand will get diluted. It's inevitable."

Private equity firms and big beauty conglomerates aren't likely to stop trying to snap up small fry, however. "The beauty companies have become extremely acquisitive because their portfolio brands have been tired and dated," says Ryan Craig, a partner at Bertram Capital Management LLC, which last year sold a majority stake in Paula's Choice, a skin-care and cosmetics maker, to TA Associates Management LP, a Boston-based private equity firm. "That has left an opportunity for a lot of small, nimble brands to attract younger consumers because they offer something new." One example: **Shiseido Co.**, Asia's largest cosmetics maker, in January acquired MatchCo, a 10-employee outfit that developed a smartphone app which scans a person's skin tone to formulate a customized makeup foundation.

Even venerable **Estée Lauder Cos.** has joined the buying frenzy. Last year it shelled out $1.5 billion—its biggest acquisition deal ever—for Too Faced Cosmetics, whose products are a big hit with women under 40. It also snatched up Becca Cosmetics, active on Instagram and Facebook and known for its shimmery highlights and appeal to young women of color, for a figure estimated to be more than $200 million. ▶

Cash That Like Button
$1.2b
acquired by L'Oréal in 2016
TA Associates bought a majority stake for an undisclosed amount
$1.5b
bought last year by Estée Lauder, its biggest acquisition ever
Too Faced
NATURAL EYES

Indie brands and products/**Brand's number of Instagram followers**

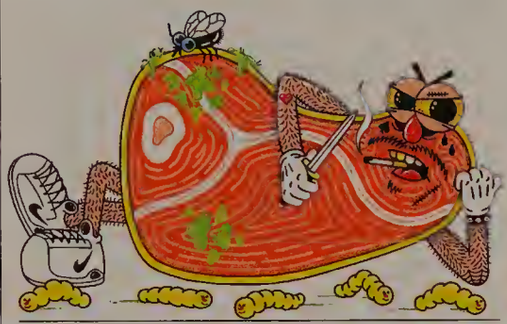
❶ Anastasia Beverly Hills' Lip Palette/**13.2m** ❷ IT Cosmetics' Your Skin But Better CC Cream with SPF 50+/**604k** ❸ Real Techniques' Ultimate Base Set/**1.6m** ❹ Paula's Choice's Clear Daily Skin Clearing Treatment/**42.3k** ❺ Makeup Geek's Kathleen Lights Highlighter Palette/**2.3m** ❻ Huda Beauty's Liquid Matte Lipstick/**18.4m** ❼ Too Faced's Natural Eyes Neutral Eyeshadow Palette/**8.5m** ❽ Kylie Cosmetics' Birthday Edition Matte Liquid Lipstick/**12.4m**

◀ Says Andrew Crawford, a managing director at private equity firm General Atlantic LLC, which acquired a majority stake in Too Faced a year before flipping it to Estée Lauder: "Success leads to a lot of interest." —*Stephanie Wong*

The bottom line There were 52 acquisitions of beauty-related companies last year. Such deals often involve small, social media-fueled targets.

Food

Will Bad Beef Taint Brazil's Meat Master?



▶ **JBS's latest scandal could ding its reputation—and its IPO prospects**

▶ **"It's another scratch in their armor"**

Not long ago, **JBS SA** was in the vanguard of Brazil's global ambitions, transforming itself into the world's largest meat producer by snagging overseas rivals in a decade-long, $20 billion acquisition spree. Now, just as Brazil is mired in recession and a seemingly endless corruption scandal, JBS is facing a crisis of its own.

Authorities in Brazil said on March 17 they're investigating evidence that employees of JBS and at least 20 other companies bribed government officials to approve the sale of tainted meat. Federal police raided slaughterhouses and alleged some operators stuffed sausages with cardboard, used acid to mask the smell of spoiled steaks, or knowingly shipped salmonella-tainted cold cuts. In a statement, JBS says it "is not accused of selling tainted or rotten meat," nor have any actions been taken against JBS executives or managers.

Although the accusations involved only a small part of JBS's operations in Brazil, they add to a series of allegations over the past 14 months that have been piling up against the company's controlling shareholders, the billionaire Batista family and its holding company, **J&F Investimentos**. Federal police raided the parent company's São Paulo headquarters twice last year in other corruption probes, and the federal budget court is investigating injections of capital into JBS by a state development bank.

J&F has repeatedly denied any wrongdoing, and longtime investors to a large extent have stood firm behind them. However, the barrage of accusations is the biggest blow to JBS's reputation and could undo years of hard-won growth. The latest crisis "could actually be quite serious," because it not only raises doubts about the safety of the company's key product but involves claims of bribery, says David Tawil, a co-founder of Maglan Capital in New York. What troubles investors most is that the scandal could further delay plans for an initial public offering in New York of JBS's non-Brazilian assets and its Brazilian processed-food unit. JBS had been expected to carry out the sale by midyear, but "if there's any truth to these allegations, then the IPO won't even be a possibility," Tawil says.

Beyond imperiling the company's stock offering, the tainted meat scandal complicates Brazil's efforts to emerge from a two-year recession that's the worst on record. The fallout was swift when an investigation was announced. China, the European Union, and Singapore were among major importers that rushed to set limits on supplies from Brazil, the world's top exporter of beef and chicken. A temporary ban in Asia could be particularly painful: China and Hong Kong consume about a third of the Latin American nation's $5.5 billion in annual beef exports.

The crackdown and investigation, called Operation Weak Flesh, is looking into the role of 33 federal food-safety inspectors; more than 30 arrest warrants have been issued. Police have also released transcripts of recorded conversations in which alleged bribes—sometimes in the form of prime cuts of beef—were discussed. In one instance, police videotaped a JBS employee arriving at an inspector's house with a Styrofoam cooler so heavy it took two people to carry it inside. In a joint statement, the federal police and the agriculture ministry said the alleged actions of the meat inspectors don't "represent a generalized malfunction of Brazil's inspection system."

Since the scandal broke, JBS and **BRF SA**, Brazil's biggest chicken producer, also named in the investigation, have been bombarding Brazilian consumers with full-page ads and prime-time TV spots extolling the safety of their products. Brazilian President Michel Temer tried to calm international anxieties by taking ambassadors from China and other importing nations to an all-you-can-eat steakhouse on March 19.

Where Brazil Exports Beef
Metric tons, thousands

❶	Hong Kong	181
❷	China	166
❸	Egypt	165
❹	Russia	131
❺	Iran	95
❻	Chile	70
❼	Saudi Arabia	29
❽	Italy	26
❾	Venezuela	23
❿	Philippines	20

Key buyers of Brazilian meat may have little choice but to stay the course. The U.S. Department of Agriculture says Brazil accounted for almost 40 percent of the world's broiler-meat exports in 2016. The U.S., the world's second-largest exporter, has been banned from shipping its chicken to China and other countries since 2015, when an outbreak of bird flu in the American Southeast wiped out more than 48 million birds. As bird flu spreads, "the world doesn't have many supply alternatives left," says Ricardo Santin, a director at Brazil's chicken and exporter group, ABPA.

The outlook for JBS's stock and bonds is less certain. Until the recent raids and allegations, JBS hadn't been directly accused of any wrongdoing in investigations involving the Batistas' holding company. Now it can't escape the spotlight. "Selling proteins that aren't fit for human consumption generates horrible headlines," says Ray Zucaro, chief investment officer of Miami-based RVX Asset Management LLC. "I don't think this scandal is the one that will blow them up, but it's another scratch in their armor." —*Gerson Freitas Jr. and Jessica Brice, with Aline Oyamada*

The bottom line Corruption scandals and a raid on slaughterhouses could singe JBS, the world's largest meat producer.

Edited by James E. Ellis
Bloomberg.com

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March 27 — April 2, 2017

No Press? No Problem

▶ Tillerson trades open access diplomacy for CEO secrecy

▶ "It's getting written a lot that he's an idiot, and he's not an idiot"

Rex Tillerson is rewriting the rules for what it means to be secretary of state. His ideas for conducting diplomacy track closely with beliefs shaped during his 40-year career at **Exxon Mobil Corp.**, where negotiations happened behind closed doors, leaks could cost millions of dollars in shareholder value, and the press was seen as a nuisance. Case in point: Tillerson's staff hand-picked just one reporter, from the Independent Journal Review, a conservative website, to join him on his plane during his recent trip to Asia.

"We have some very, very complex strategic issues to make our way through with important countries around the world, and we're not going to get through them by just messaging through the media," Tillerson told IJR. "We get through them in face-to-face meetings behind closed doors."

For the group of reporters covering him at State—who were used to being on the same plane with previous secretaries—keeping up with Tillerson was impossible. The itinerary was as follows: Land in Tokyo and meet top officials; fly to a U.S. air base in South Korea and hitch a helicopter ride to the North Korean border; bed down in Seoul for the night; then fly to Beijing before returning to the U.S. Total time in the neighborhood: about 84 hours.

The beat reporters had to trail Tillerson on their own flights, and the IJR journalist was told not to update her colleagues with his whereabouts. Although the media stayed in the same hotels as Tillerson in Seoul and Beijing, America's top diplomat was basically off the grid for hours at a time. "I'm not a big media press access person," he told IJR in an interview between Seoul and Beijing. "I personally don't need it."

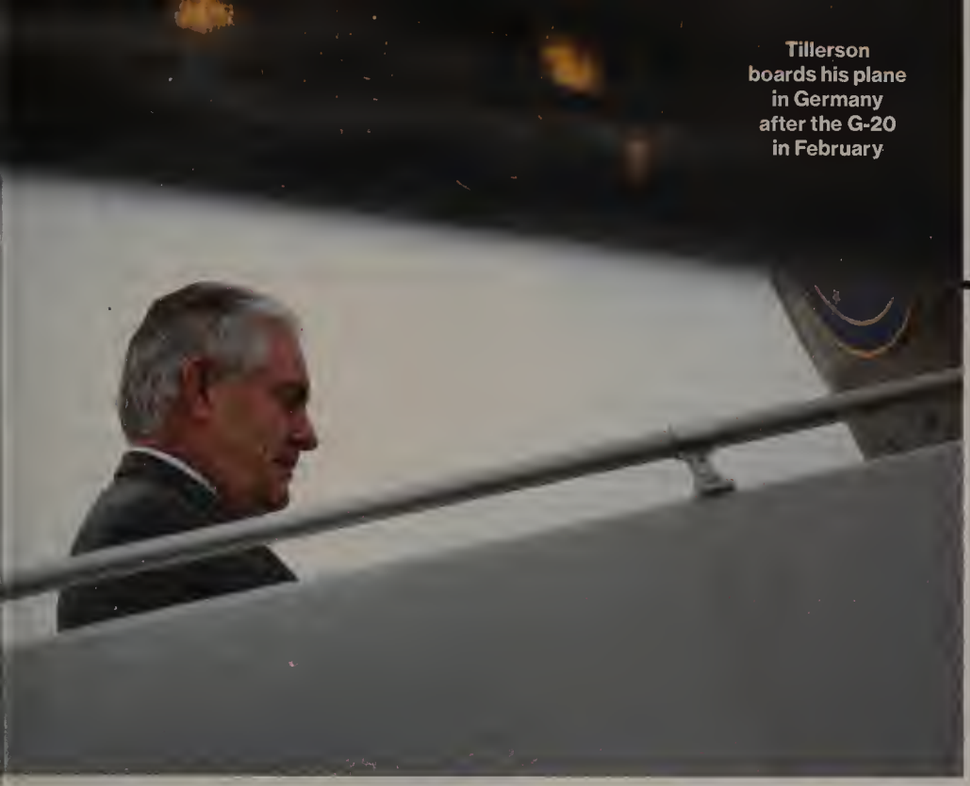
Tillerson's style marks a clean break with traditional notions of what it means to be America's top diplomat. For decades, public relations was as much a part of the job as private negotiations, both to champion American ideals and to make sure the guy on the other side of the negotiating table didn't control the message.

Tillerson is forgoing the PR role. He's dispensed with news conferences—taking questions instead at tightly controlled "media availabilities" in Tokyo, Seoul, and Beijing from outlets chosen by his staff. He hasn't dropped by U.S. embassies in the countries where he visits. And he has so far declined to elucidate any foreign policy vision in public, other than to say he supports Donald Trump's call to cut his agency's budget by nearly a third.

Aides say Tillerson sees himself as a man of action who wants to spend his limited time getting the job done and not talking about it. They say he'll deliver a message when he has something to say, and that's it. "What we know about Tillerson is that he comes from a 'small r' view of realism of foreign policy, that money is power, weapons are power, but ideas are not so much power," says Heather Hurlburt, who wrote speeches for Democratic Secretaries of State Warren Christopher and Madeleine Albright.

Tillerson views himself as the antithesis of his predecessor, John Kerry. The rap on Kerry was that he never met a camera he didn't like. He was happy to fly to Geneva, spend two days locked in negotiations about Syria, fail to reach a deal, and hold a news conference saying so. For good measure, he might throw a few verbal jabs at his counterpart standing 3 feet from him on the podium. "The days of knocking a soccer ball around on the tarmac between press conferences are over," says Tillerson spokesman R.C. Hammond, a former Newt Gingrich aide who came to the State Department with a mandate to shake up the old order. "Instead, we are going to do actual diplomacy that leads to results—then press conferences."

Tillerson is also taking seriously his boss's decision to eliminate wasteful spending. He's chosen to fly on a modified Boeing 737, which carries fewer people than the modified 758 Kerry



Tillerson boards his plane in Germany after the G-20 in February

Five Black Hawks, or one NEA? 24

Blue state AGs: The front lines of anti-Trump 25

used and flies faster. He travels with a lighter footprint, as his staff likes to say. That means a slimmed-down staff. Speechwriters, press handlers, and deputies stay at home. If that means the media get things wrong, so be it.

That was made clear in Seoul on March 17. A local paper reported that Tillerson had canceled dinner with top officials because of fatigue. The rumor turned out to be false. A dinner was never planned. The problem wasn't so much that he had no pool reporters traveling with him, but that Hammond was unavailable to handle questions, and Tillerson hadn't brought a press wrangler to keep reporters apprised of the secretary's every move on such trips. Had he done so, the fatigue story would have been shot down in minutes.

While Tillerson's staff stays busy sculpting his image as a doer and not a talker, there's an equally plausible reason for his reticence to deal with the press. The Trump administration, like any other, has competing power centers when it comes to foreign policy. Getting out too far ahead of Trump, especially early in the presidency, could prove disastrous. And yet in the vacuum left behind, negative stories have begun to percolate about Tillerson not being up to the job. "It's getting written a lot that he's an idiot, and he's not an idiot," Hurlburt says. "First-term secretaries usually have to be a little careful of how much independent profile they have."

When news broke on March 21 that Tillerson may skip the annual NATO meeting in April, the blowback was quick and bipartisan. "I believe all the incoming crowd at the State Department are internationalists. But to basically say, 'Withdraw, I'm going to forfeit engagement,' that's a mistake," says Daniel Runde, a Republican who's a fellow at the Center for Strategic and International Studies in Washington. Ivo Daalder, the permanent U.S. representative to NATO from 2009 to 2013, was even more critical: "He's dissing them, and what's more, he works for a president who ran for office on an anti-NATO platform. There's a lot of reassurance to be done." —*Nick Wadhams*

The bottom line Tillerson is eschewing traditional modes of diplomacy for a more secretive, no-frills approach.

Elections

Cambridge Analytica's Low-Tech Fisticuffs

- **Beneath its high-tech data is a history of political subterfuge**
- **"Previously we were able to do our job in the background"**

Last fall, the political consulting firm Cambridge Analytica gained fame as the group of nerdy British data scientists that helped Donald Trump get elected. The firm says it's able to use its "psychographic data models" to sway undecided voters by targeting people's social media profiles and serving up messages and ads based on their perceived biases.

Cambridge Analytica now hopes to leverage that success—and its ties to Trump—to do more business with the U.S. government. Working from offices just blocks from the White House, it's been pitching itself to defense and national security agencies. In February it signed a $500,000 U.S. State Department contract to fight radicalization of young people abroad.

While Cambridge Analytica has faced scrutiny before over whether its data models actually work, a closer look at the past practices of its London-based affiliate, **SCL Group Ltd.**, reveals a corporate DNA less predisposed to dazzling technologies to sway voters than to using old-fashioned tricks and political subterfuge.

Alexander Nix set up Cambridge Analytica in 2013 to target the U.S. market, installing himself as chief executive officer after 14 years as a director of SCL. In the past year, Nix, 41, has become a darling in tech and marketing circles, popping up on the international speaking circuit to promote the firm's data-driven approach. He says Cambridge Analytica is active in national campaigns on four continents, yet he admits the sudden fame may have a downside. "It could be a double-edged sword," he says. "We might lose clients who don't want to have a more high-profile company working for them. Previously we were able to do our job in the background."

In Latvia, SCL said it ran a campaign in 2006 designed to stoke tensions between Latvians and ethnic Russian residents: "In essence, Russians were blamed for unemployment and other problems affecting the economy," an SCL document said. Nix confirms the firm's role, saying that its research found that such tensions would "influence voting behavior."

SCL's website says it advised the Latvian candidate Ainars Slesers and his running mate, Andris Skele, in 2010. While their party alliance won eight seats in Parliament, it never joined the governing coalition. Marcis Bendiks, who advised Skele and was asked by the alliance to examine why it did so poorly, says SCL subcontracted its polling to a local company, **Latvijas Fakti**, but ▶

◀ never paid it for the work. Aigars Freimanis, the company's founder and adviser to the current Latvian prime minister, confirmed SCL never paid up. "It was amateurish," says Bendiks. "We were extremely suspicious about the claims they could do this.... They never had the capacity to make a decent poll themselves." Nix says he provided a 148-page report to the party and that SCL wasn't responsible for paying the polling agency. Freimanis disputes this, saying his contract was with SCL. Slesers declined to comment.

According to documents seen by Bloomberg, SCL says it helped a candidate in Trinidad by spraying graffiti slogans that appeared to be the work of young Trinidadians. "The client was then able to 'adopt' related policies and claim credit for listening to a 'united youth,'" SCL documents show. Nix acknowledges advocating the use of "street media" such as graffiti and fly posters and says it's "normal election practice in many of the Caribbean islands." The work was for the United National Congress, which didn't respond to requests for comment.

On the tiny Caribbean island of St. Lucia, SCL did a research project for the government to understand how to stem rising crime, according to its marketing presentations. Hoping to build on its work there, the firm offered to help Prime Minister Stephenson King on his 2011 reelection campaign for free, according to a former employee. In return, after getting reelected, the government of St. Lucia would pay SCL $1.9 million to run a public-health campaign focusing on smoking and obesity, the person said. The source claims that the actual cost of the health campaign was $1 million, and that the $900,000 difference was supposed to go toward back payments to SCL for election work. King lost, and the development project never happened. Nix says they didn't work on the 2011 election campaign. King, now St. Lucia's infrastructure, powers, energy, and labor minister, declined to comment.

SCL also played a role in the 2007 general election in Nigeria, which was won by the late Umaru Yar'Adua's ruling People's Democratic Party (PDP). According to the U.K.'s Department for International Development, the 2007 elections were "the worst in Nigeria's post-independence electoral history" due to widespread ballot box stuffing, falsification of votes, and "deliberate denial of election materials to perceived strongholds of the opposition."

SCL's original description of its work in Nigeria echoes some of those concerns. According to a 2016 version of its website, SCL advised the PDP to try to dissuade opposition supporters from voting. This was achieved, the website said, "by organizing anti-poll rallies on the day of the election." SCL later revised its website to say it "advised its client to focus on discrediting their opponent's electoral policy platform ... by organizing rallies on the day of the election to highlight those shortcomings." Without saying why the web wording changed, Nix denies that SCL has ever "undertaken any campaign to discourage voting or undermine the democratic process." A party spokesman, Olisa Metuh, said he wasn't aware of SCL's work and couldn't comment.

Cambridge Analytica's role in the U.K.'s referendum on European Union membership is also unclear. "We did undertake some work with Leave.eu, but it's been significantly overreported," Nix said in a Feb. 8 interview with Bloomberg. Richard Tice, co-founder of Leave.eu, said on Feb. 23 that the campaign used SCL "to target supporters and the way we used our database, Facebook, Twitter, and website users." He adds, "They massively increased the quality of targeting of data."

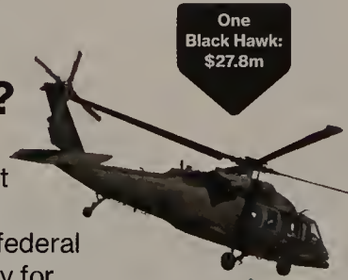
But the story changed after the *Observer* reported on Feb. 26 that Cambridge Analytica had provided free services to Leave.eu, and raised questions about whether the work was an in-kind donation that should have been reported. Under U.K. Electoral Commission rules, campaigners are required to report all donations over £7,500 ($9,365). The commission confirmed that Leave.eu didn't report any donation from Cambridge Analytica.

A few days later, Cambridge issued a statement denying any involvement in the campaign. Tice, reached again by phone, stood by his statements that the firm worked for Leave.eu and said of Cambridge Analytica's denial, "Just put it down to politics." A U.K. data watchdog, the Information Commissioner's Office, said it's contacted Cambridge Analytica because of concerns about its use of personal data. A Cambridge spokesman confirmed it's in touch with the ICO and "happy to demonstrate that we are entirely compliant with the law."

Nix graduated from the elite boarding school Eton College, as did SCL's 55-year-old founder, Nigel Oakes. Oakes says on SCL's website that he "was educated" at University College London,

Budget How Many Black Hawks Will Trump's Cuts Buy?

President Trump proposed increasing the defense budget by $54b to a total of $639b, paid for in part by eliminating federal funding for 80 programs, many for the arts, sciences, and education. Here's a look at three of those programs and what their budgets would buy at the Pentagon.



Obama's FY17 budget provided $1b to buy 36 Black Hawk helicopters

NASA Office of Education
$115m

National Endowment for the Arts
$148m

Corporation for Public Broadcasting
$445m

but there's no record he studied there, says a university spokesman. Nix says Oakes attended UCL "in a private capacity." Oakes also says he worked with Adrian Furnham, a UCL psychology professor, in 1989 as part of a group studying the "psychology of influence," which he used as the philosophical underpinning of SCL's methods.

Furnham disputes this. "He has made up many stories about working and studying here which are untrue," he wrote in an email. "A colleague and I (Prof Barrie Gunter) did some desk research for him but cut ties because of his behavior. He seemed little interested in evidence." —*Stephanie Baker, David Kocieniewski, and Michael Smith*

The bottom line Before helping Trump win with its high-tech data models, Cambridge Analytica perfected a low-tech brand of political persuasion.

The Law

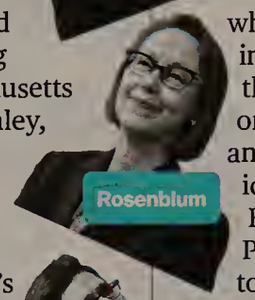
Blue State AGs: The Dems' New Resistance

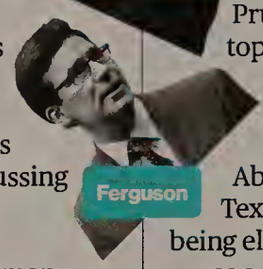
- **Adopting a Republican strategy to thwart a president in court**
- **"We are now perceived by many to be the front line of defense"**

With Democrats outnumbered in Congress, a coalition of blue state attorneys general has emerged as the strongest resistance to Donald Trump's conservative agenda. Together they've notched back-to-back victories against Trump's two attempts to instill a travel ban against several Muslim-majority nations. They now hope to build on that success to form a united front against Trump's expected efforts to roll back financial and environmental regulation, plus the GOP's planned repeal of Obamacare.

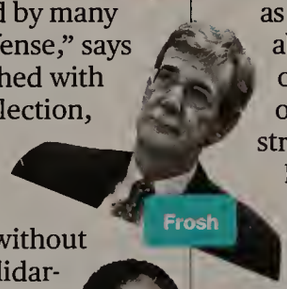
In February, Washington State Attorney General Bob Ferguson and Minnesota's Lori Swanson led the way in derailing Trump's first immigration order by persuading a panel of federal judges to block it from being enforced. Trump, rather than keep fighting, issued a revised order. That, too, was halted on March 15 when a federal judge in Hawaii ruled in favor of the state's attorney general, Doug Chin, who'd sued on the grounds that the order was discriminatory. Both suits benefited from an increased level of coordination among Democratic state attorneys general, an effort that began before Trump's inauguration.

"We had anticipated the administration might do something like this, and we'd already started collaborating weeks before," says Massachusetts Attorney General Maura Healey, who joined the initial suit in February, along with New York's Eric Schneiderman and Maryland's Brian Frosh. When news broke of Trump's initial travel ban on Jan. 27, Healey, along with about 20 other Democratic AGs, was at a luncheon in Florida discussing how to join forces to take on the president.

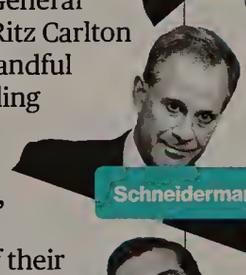


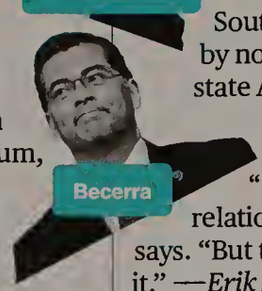


"We are now perceived by many to be the front line of defense," says Schneiderman, who clashed with Trump even before the election, when he sued Trump University for alleged fraud. (Trump agreed to pay $25 million to settle without admitting guilt.) "The solidarity among Democratic AGs and the mutual support has been tremendous."



That solidarity was also on display in February at the National Association of Attorneys General winter conference at the Ritz Carlton in Washington, where a handful of Democratic AGs, including Healey, Schneiderman, and California's newly appointed Xavier Becerra, met privately on the sidelines and out of earshot of their Republican counterparts to talk strategy and tactics. Oregon Attorney General Ellen Rosenblum, who co-chairs the Democratic Attorneys General Association, says that since the election, Democratic AGs have almost daily conference calls.





Blue state AGs are also teaming up to fight Trump's efforts to cut environmental regulations. On Feb. 7, seven states with Democratic AGs joined California's Environmental Protection Agency in a joint letter to Congress challenging a plan to roll back safeguards for controlling methane leaks from oil and gas wells on public lands.

Democratic AGs are trying to replicate the success that their Republican counterparts had during the Obama administration, when a handful of red state AGs worked to thwart what they saw as the overreaching agenda of a president from the opposite party. Suing Obama on issues including immigration and health care boosted the political fortunes of a number of Republican AGs, including Scott Pruitt, who was Oklahoma's top law enforcement official when Trump tapped him to run the U.S. Environmental Protection Agency, and Greg Abbott, who spent 12 years as Texas' attorney general before being elected governor in 2014. Serving as a state attorney general is "probably the most direct path to higher office," says Chris Wilson, founder of **WPA Research**, a political strategy firm.

He should know: His firm did polling and data analytics for Abbott's gubernatorial campaign. In Texas, Abbott was able to run on his record of suing a locally unpopular president more than 30 times. "You can build an entire campaign for higher office around that," says Wilson. "The flip side is that you're going to see a lot of Democrats angle for the same thing."

Bob Shrum, a veteran Democratic strategist who teaches political science at the University of Southern California, says that by notching wins against Trump, state AGs can help make up for Democrats being in the minority in Congress. "They can't upend the power relationship in Washington," he says. "But they can certainly impact it." —*Erik Larson, Esmé E. Deprez, and Kartikay Mehrotra*

The bottom line With Democrats out of power in Washington, state attorneys general have taken up the fight against Trump and the GOP.

Edited by Matthew Philips
Bloomberg.com

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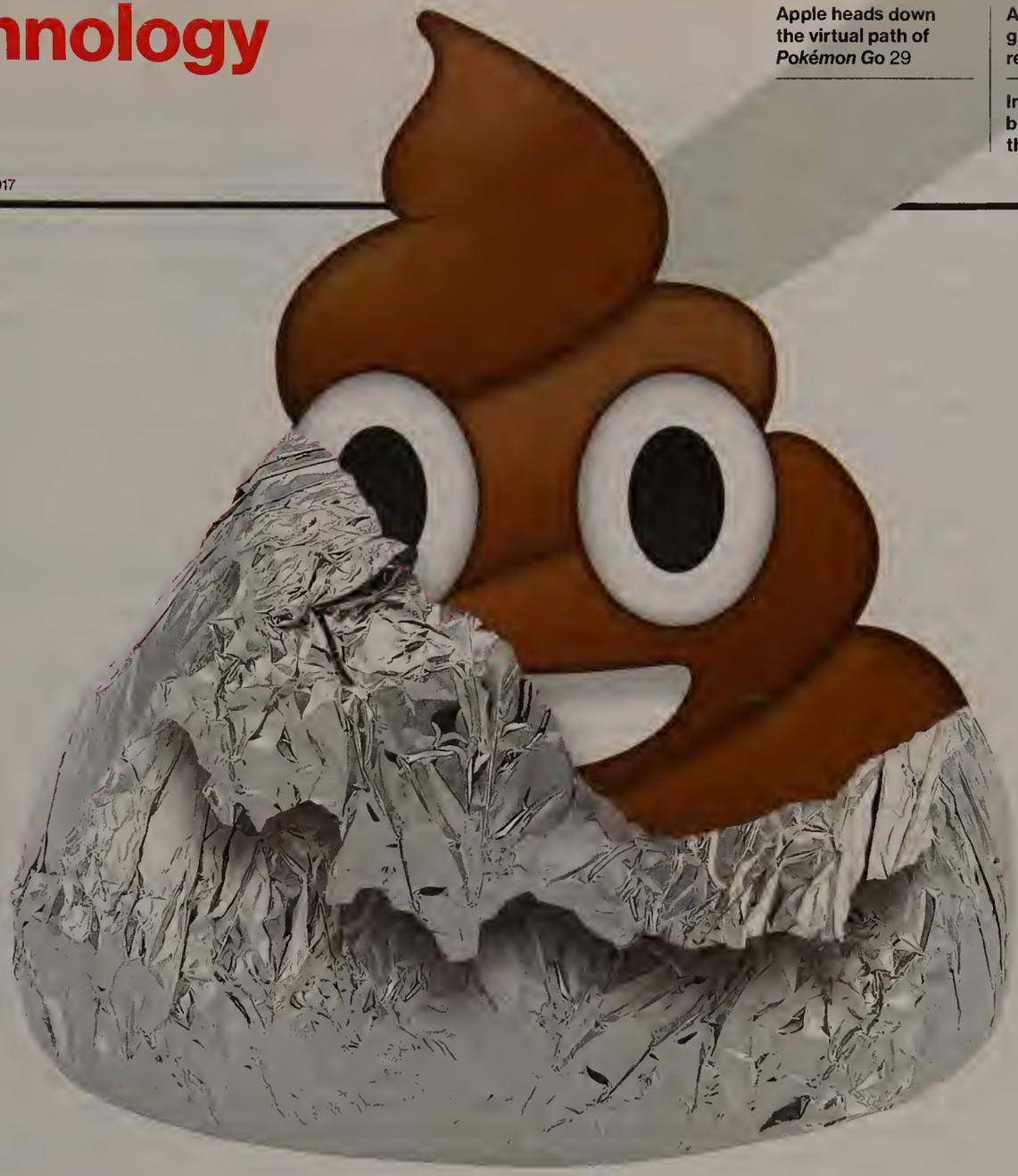


Unsweetened

▶ A Wall Street star has developed mints to curb your sugar cravings

▶ "I figured if I wanted it, other people would, too"

It started with a Nestlé Crunch bar. One night in 2012, Rob Goldstein returned from a New York kickboxing gym to his Upper East Side apartment and ate a healthy dinner. Then he saw the chocolate, which his son had left on the kitchen table. One bite quickly turned into eight. "I don't know what came over me," he says. He decided to find out. If he could reset his taste buds to how they were before that first bite, he thought, his willpower ought to stand a better chance.

Since 1989, Goldstein has been a part of one of the most successful teams on Wall Street. He's the right hand to Joel Greenblatt, whose hedge fund, Gotham Capital, posted annualized returns of more than 50 percent before returning money to clients in the mid-1990s. After the fund closed, Greenblatt and Goldstein continued to invest their own wealth, famously seeding Dr. Michael Burry, the hedge fund manager profiled in *The Big Short*, who made a fortune in the financial crisis because he'd bet against mortgage bonds.

Crave Crush could be mistaken for regular breath mints if not for a faint mineral taste

These days, Goldstein and Greenblatt manage more than $6 billion of their own and others' money at their renamed firm, **Gotham Asset Management**. On the side, Goldstein sells $16.99 packages of mints to battle sugar cravings.

Now 51, Goldstein started researching sugar with the same rigor he'd apply to a powerful investment. He read scientific papers, called experts, and ▶

◀ recruited a team. He says he's put well over $10 million into the mints, which he calls **Crave Crush**, and that there are clear parallels between making sweet suppressants and picking stocks. "When you invest, you have to look at the facts and ignore what everybody else says or does," he says. "With this, I didn't care about how anybody else said anything would work. A lot of people told me it wouldn't work. There was always a ton of skepticism. I just basically ignored them."

Early on he experimented with mouthwash, but it dried him out too much. A chance email from a University of Pennsylvania doctor whose research Goldstein had supported led him to check out gymnema sylvestre, an herb native to India known to temporarily suppress a person's ability to taste sweetness. In ayurvedic medicine, leaves of the plant have long been used to treat diabetes, and most health-food stores carry teas and pills containing the stuff. In his home office, Goldstein opened up a capsule, put a little on his tongue, and tried an M&M. The leaf had an unpleasant bitter taste, he says. But, intriguingly, it made the chocolate taste like "salty mud."

The UPenn doctor suggested he talk to Gary Beauchamp, director emeritus of the Monell Chemical Senses Center in Philadelphia and an expert on taste and smell. "It took me a while to realize that he was very serious," says Beauchamp, who told Goldstein about certain mouth-based radiation treatments that sometimes suppressed the motivation to eat among patients who'd lost their sense of taste.

For Goldstein, this was like having a hunch that a company was grossly undervalued and finding proof he was right. "This wasn't some guy's opinion" that blocking taste could curb appetite, he says. "This was hard evidence." Through Beauchamp, he hired Grant DuBois, a retired chemist who'd worked as the director of ingredient sciences for Coca-Cola Co.

In his lab in Atlanta, DuBois started playing with formulations. One idea, to mix gymnema with a zinc compound, worked: Combining the two prolonged the sweet-blocking effect of gymnema and reduced the bitterness. In mid-2014 the company filed for a patent on the discovery. It was granted last year.

Meanwhile, Goldstein hired Arianne Perry, an elite runner who worked at JPMorgan Chase & Co., to help get the company going. Perry lined up a source of gymnema, hired manufacturers, and persuaded Eric Stice, a psychologist at the Oregon Research Institute, to study Crave Crush's effects.

Stice uses MRI scanners to look at how people's brains react to sweet stuff. He says he was skeptical the mints would curb a brain's response to sugar links, but he's now convinced Goldstein is onto something. "I was so tickled when we got the results back," he says. "Like, 'Ah shit, he was right.'" Stice hasn't published his results yet.

Crave Crush's dime-size white-and-blue lozenges do indeed make sweets taste awful for a short time. They could be mistaken for regular breath mints if not for a faint mineral taste. Goldstein has spent months handing out samples to friends at poker games, on vacation in Aspen, Colo., or wherever people will listen. Selling Crave Crush may prove to be a bigger challenge. "To me it seems crazy," says Marion Nestle, a professor of nutrition and food studies at New York University. "Why would anybody want to take something that makes food taste bad?"

It's not a panacea for the epidemics of diabetes or obesity, either. The wealthy people most likely to buy Crave Crush already eat less sugar, says Barry Popkin, a nutrition professor at the University of North Carolina at Chapel Hill. "It's a great idea for his friends," he says, "but it's not going to affect the population that we're trying to reach," meaning poor communities.

Americans spend about $40 billion a year on health supplements ranging from vitamins to bee pollen, estimates the *Nutrition Business Journal*. While some are effective, many are medically unproven. Supplements related to dieting and weight loss are notoriously faddish, says Yadim Medore, chief executive officer of marketing company Pure Branding. "It's the category that everyone wants to be in, because everyone sees dollar signs in it," he says.

Goldstein is still not sure Crave Crush will catch on, but he's gotten much further than he expected. "I was just trying to create something I wanted," he says. "I figured if I wanted it, other people would, too." Besides, he adds, if the business fails, "I can afford it."

On a recent Friday, Goldstein makes his way to the Grand Hyatt in Midtown Manhattan for New York City Mania, a fitness expo. In addition to selling online and through a few high-end pharmacies in New York, Crave Crush is dispatching a handful of staffers across the country to events like these, hoping to build buzz.

A DJ from a company that sells mixtapes is playing an album of exercise jams called *Mashup Party! Vol. 13*. At one end of the lobby, pitchmen show off an array of fad workouts, using hula hoops, a trampoline, and choreography inspired by Bollywood movies. At the other, about 30 feet from the hotel check-in line, bearded men with biceps bulging under their Crave Crush T-shirts chat up personal trainers and occasionally interject a sales pitch.

"I'll work out all day, and I'm

Quoted

"The beliefs and approach to leadership that have guided my career are inconsistent with what I saw...at Uber."

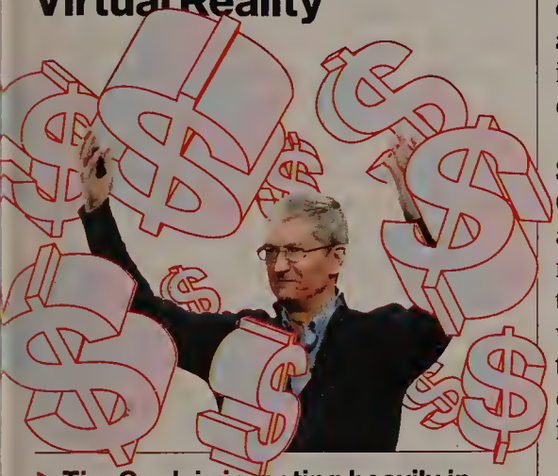
Jeff Jones, president of Uber Technologies Inc., in a statement to *Recode*, which broke the news on March 19 that he's quitting after six months

constantly thinking about it," says Jodi Druzba, co-owner of Average Joe's Fitness in Rotterdam, N.Y., as she sucks on one of the lozenges. "I wish I could teach my brain to not eat sugar." One of the Crave Crush workers offers her a peanut M&M. Druzba eats the candy, then twists her face into a grimace. "It tastes like poop!" She buys 60 mints.
—Noah Buhayar, with Patrick Clark

The bottom line A hedge fund veteran who wowed a scientist with his sweetness-blocking mints is pitching them to a broader audience.

Mobile

Apple's Alternative to Virtual Reality



▶ **Tim Cook is investing heavily in augmented-reality systems**

▶ **"It's something they need to do to continue to grow"**

Tim Cook has talked up a lot of technologies since becoming **Apple Inc.**'s chief executive officer in 2011. Driverless cars. Artificial intelligence. Streaming TV. But no technology has fired him up quite like augmented reality, which overlays images, video, and games on the real world. (Think *Pokémon Go*, not Oculus Rift.) Cook has likened AR's potential to that of the smartphone. He predicted at a tech conference late last year that eventually we'll all "have AR experiences every day, almost like eating three meals a day. It will become that much a part of you."

He isn't just speculating. People with knowledge of the company's plans say Apple has begun an ambitious bid to bring AR to the masses, an effort Apple's leaders see as the best way for the company to keep users wedded to its software and dominate the next generation of hardware.

Apple has built a team combining its hardware and software veterans with talented outsiders. Run by a former executive from audiovisual pioneer **Dolby Laboratories**, the group includes engineers who worked on the Oculus VR and HoloLens virtual-reality headsets sold by **Facebook** and **Microsoft**, plus Hollywood digital effects wizards. Apple has also acquired several small companies with knowledge of AR hardware, 3D gaming, and VR software.

The company has been working on several AR products, including digital glasses that could connect wirelessly to an iPhone and project movies or maps on their lenses. While the glasses are a ways off, AR features could show up in iPhones sooner. Apple declined to comment for this story.

Except for novelties such as Snap Spectacles and disasters such as Google Glass, digital glasses aren't getting the attention of more immersive, gamer-focused VR headsets. Cook is gambling that, as he said last year, few people will want to be "enclosed in something" as they are with VR goggles, even once the leading VR companies improve their technology.

As *Pokémon Go* suggested, there's money to be had in AR. A roughly $90 billion global market, it's set to rise 80 percent by 2024, according to researcher Global Market Insights Inc. And Apple has to pursue AR, because otherwise the growth of such devices will sap attention from its products, says Gene Munster, a founding partner at Loup Ventures who covered the company for many years as an analyst. "It's something they need to do to continue to grow," he says, "and defend against the shift in how people use hardware."

Adding AR features to the iPhone isn't a giant leap. Building slim, sturdy, adequately powerful glasses will be tougher. Like the Apple Watch, they'll probably be tethered to the iPhone. Beaming 3D images to the glasses will require a lot of power and therefore strong battery life, plus a new operating system and maybe a new chip. Apple will have to source the guts of the glasses cheaply enough to keep them affordable. Perhaps most important will be apps, games, and other functions useful and cool enough to get people wearing the things.

Apple recruited Dolby veteran Mike Rockwell in 2015 to lead its AR division. Along with the Oculus VR and HoloLens veterans, his lieutenants include lead designers of the Apple Watch, developers hired from AR glasses maker **Meta**, 3D animators who worked on *Avatar*, and the creator of audio standard THX, say the people with knowledge of Apple's plans. "He's very seasoned," Oculus VR co-founder Jack McCauley says of Rockwell. "If they were to hire a guy for this job, they'd hire him."

Apple's acquisitions may also help Rockwell. It bought AR software maker Metaio in 2015 and AR camera software company FlyBy Media Inc. last year. Former Metaio CEO Thomas Alt now works on Apple's strategic deals team, which decides which technologies deserve investment. Last summer, Cook visited the offices of **Magic Leap Inc.**, a secretive AR startup valued at $4.5 billion, and displayed interest in its technology, say those with knowledge of Apple's plans. Magic Leap declined to comment.

Hundreds of engineers are now on Rockwell's projects, including some on the iPhone camera team who are working on AR-related features for the phone, according to one of the folks with knowledge of Apple's plans. One feature Apple is developing would let users take a picture with their phones, then change the depth of the photo or specific objects in it. Another would isolate an object in an image, such as a person's head, that could then be rotated 180 degrees. A third feature would use AR to place virtual effects and objects on a person, as **Snapchat** does. The iPhone camera features would probably rely on a technology known as depth sensing and use algorithms created by PrimeSense Ltd., an Israeli company Apple acquired in 2013.

$90 billion
Size of the global market for AR gadgets and software

Apple's AR-enhanced glasses aren't expected to arrive before 2018 at the earliest. The company is conscious ▶

◀ of how tough it is to make wearable gadgets seem like must-owns, since Google Glass became a laughingstock in 2014 and Apple's own watch failed to become a mainstream hit in 2015. Rockwell's developers will need to build a device that expands on the usefulness of iPhones and iOS without messing up the things people like about them. "To be successful in AR, there is the hardware piece, but you have to do other stuff too, from maps to social to payments," Loup's Munster says. Still, he adds, if history is any guide, "Apple is one of the only companies that will be able to pull it off." —*Mark Gurman, with Alex Webb and Mark Bergen*

The bottom line With the market set to rise 80 percent by 2024, Apple is tapping hundreds of engineers to develop AR hardware and software.

Marketing

Beware Google Ads for 'Abortion Consultations'

- **Religious-affiliated groups are testing controversial mobile tools**
- **"The technology backbone undergirds it all"**

Imagine you're pregnant, and you don't want to be. You type "abortion pittsburgh" into **Google**, and the first result is the Pittsburgh Women's Clinic, offering "free abortion consultations." "Only you know what's best for you," the Google ad reads. "Same-day appointments available. Call now!" You click and come face-to-face with a photo of a smiling woman with a stethoscope. "Looking for an abortion?" she asks in 65-point font. But you won't get one from her or from the Pittsburgh Women's Clinic. No clinic with that precise name exists.

The site is a landing page for a network of 41 pregnancy centers seeking to deter women from getting abortions. These centers, located in what they say are America's "most abortion-dense cities," are affiliated with or owned by Human Coalition—formerly Online for Life, sometimes going by the name Media Revolution Ministries—a Texas-based nonprofit that reaches "abortion-determined women" via ad campaigns shaped by search engine optimization (SEO) and search engine marketing (SEM). If you call the number on the landing page or initiate an online chat, you're connected with Human Coalition's national call center and, eventually, a nearby pregnancy center. The Google ad showed up because you were within 15 miles of one.

> **"These centers are bullies. They're sanitizing their image, but the goals and tactics are the same."**
> ***—Amy Everitt, state director of Naral Pro-Choice America for California***

In Pittsburgh, 30 percent to 40 percent of women who got abortions last year first spoke to a representative "working to rescue the child and the mother," says Human Coalition co-founder Brian Fisher, based on his own data and numbers from the Centers for Disease Control and Prevention. Operators tell callers the centers don't provide or refer for abortion, Fisher says. Nationwide, 1 in 3 women who connect with a Human Coalition representative visit one of the group's pregnancy centers. "The technology backbone undergirds it all," he says.

The U.S. has more than 3,000 pregnancy centers explicitly steering women away from abortions, compared with only 1,671 facilities that perform the procedure. Pregnancy centers are typically 501(c)(3) nonprofits backed by religious donors, though nine state governments also subsidize them. Human Coalition has been funded in large part by Farris Wilks, the Texas fracking billionaire and evangelical pastor, whose $2.2 million donation in 2012 increased the organization's revenue 30-fold, according to IRS disclosures.

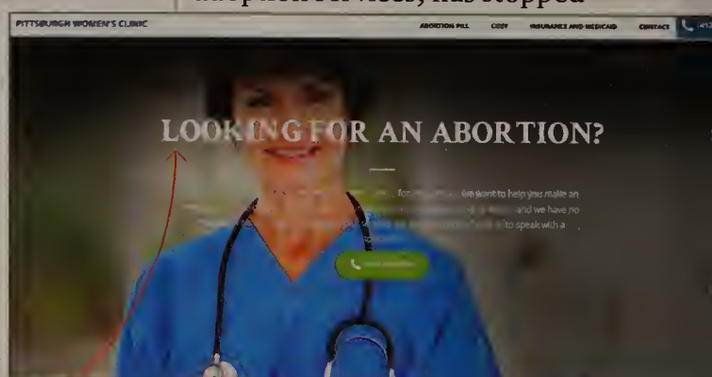
Targeting ads with SEO and SEM is becoming standard practice for pregnancy centers, overseen by umbrella groups such as Human Coalition, Heartbeat International, and Care Net. Several rally support and solicit donations through apps, pinging users to pray when a woman visits a center and, later, updating them on her decision. A chain of centers in California is testing telemedicine. Another chain has geofenced abortion clinics, meaning it has paid to show ads on the smartphones of people in waiting rooms.

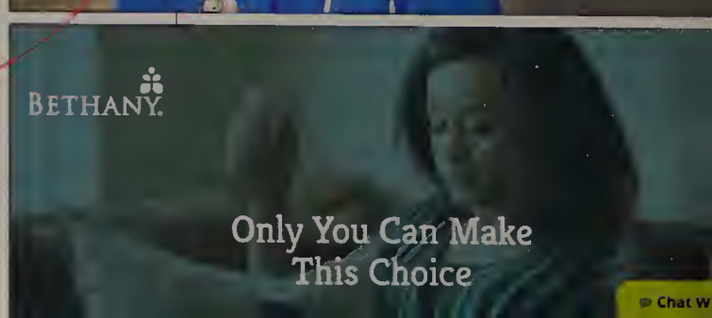
"These centers are bullies," says Amy Everitt, state director of Naral Pro-Choice America for California. "They're sanitizing their image, but the goals and tactics are the same." Her group has published reports documenting undercover investigators at pregnancy centers being routinely given false medical information and shamed for seeking abortions.

Pregnancy centers using SEO and SEM buy Google ads for keywords and phrases including "abortion" and "abortion clinic." Like the Pittsburgh network, many don't immediately make clear what they're advertising. "The more 'pro-life' we are in our marketing, the more we drive away those who need us," reads a post on Pregnancy Help News, a website for which Heartbeat International acts as the publisher. "If Jesus blurted out, 'I am the Christ!,' [nonbelievers] would have likely run."

Everitt says this tactic amounts to false advertising and that her group works with Google Inc. to flag misleading search results, which violate the company's ad policies, for removal. Pregnancy centers say their ads aren't inherently misleading. "A lot of people search for abortion information," says Human Coalition's Fisher. "It doesn't mean they want an abortion."

Sometimes, though, pregnancy centers say they've gone too far. Allison Poosawtsee, digital marketing director for the 100-location nonprofit Bethany Christian Services, says her organization, which also provides adoption services, has stopped





targeting ads to women inside abortion clinics, a practice that prompted public outcry. "We didn't feel right about it," she says, because women seeing the ads had likely made up their minds. Bethany's geofencing campaign, which ran for three months in 2015, generated 16,652 sessions on the organization's landing page, impregnant.org.

Baltimore, New York, and San Francisco have passed ordinances requiring centers to disclose that they don't provide or refer for abortion, and Oakland, Calif., levies fines if ads imply they do. Naral helped draft a 2015 California law that requires centers to refer. (This compares with more than 1,000 restrictions on abortion clinics across the U.S., 30 percent passed in the past seven years.) The California rules have withstood court challenges, but lawyers for centers fighting the statewide law say they plan to appeal to the Supreme Court as early as this fall.

Pregnancy centers say they're expanding beyond counseling and ultrasounds with an eye to supplanting Planned Parenthood. Some offer parenting classes and financial assistance. Obria Medical Clinics, the California chain testing a telemedicine app at its six centers, delivered primary-care services to about 4,000 patients last year. "We'll provide an alternative," says Obria founder Kathleen Eaton Bravo, who regrets getting an abortion decades ago. "I started this organization not to take away options, but to provide them." Her centers offer testing for sexually transmitted diseases but no forms of contraception.

The stakes of confusing one kind of facility for the other can be high for pregnant women, whose options for terminating a pregnancy become fewer and costlier over time. Molly Spadt, 30, of Lincoln, Neb., once visited an Omaha pregnancy center she mistook for an abortion clinic. The billboard and radio ads she saw didn't disclose its religious affiliation, and she only figured it out after a sonogram. "The words 'choice' and 'options' were what made me feel comfortable," she says. "It's incredibly deceptive." —*Alice Hines*

The bottom line America's 3,000 pregnancy centers are adopting online and mobile ad tactics to draw women away from abortion providers.

Edited by Jeff Muskus
Bloomberg.com

Innovation

Pollinator Drones

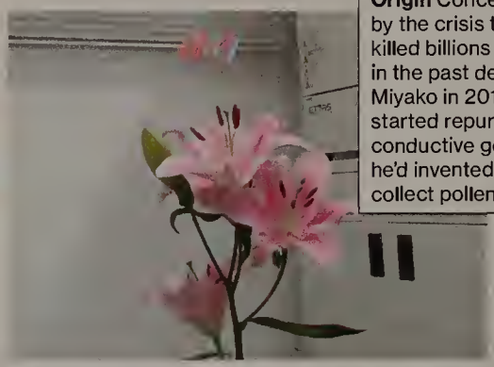
Form and function
Miyako has invented an adhesive gel that collects flowers' pollen grains and deposits them on other flowers upon contact. His goal is to offer farmers a tool to complement, not replace, bees and other natural pollinators.

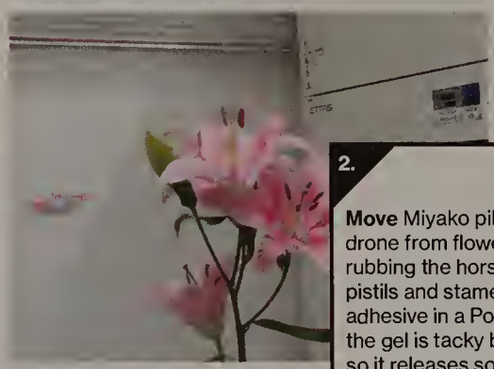
Innovator Eijiro Miyako
Age 37
Senior researcher at the National Institute of Advanced Industrial Science and Technology in Tsukuba, Japan

Origin Concerned by the crisis that's killed billions of bees in the past decade, Miyako in 2015 started repurposing conductive gels he'd invented to collect pollen.

1.

Stick The gel is applied to a small patch of horsehair anchored to the underside of a butterfly-size commercial drone. The water-resistant gel is durable but soft enough to avoid damaging the flowers.





Safety Miyako says experiments he's done on mouse cells show the gel is harmless and could be tweaked to be made biodegradable.

Funding To his wife's chagrin, Miyako paid for the drones himself. Last year he received a $32,000 grant from the Japan Society for the Promotion of Science to further develop them.

2.

Move Miyako pilots the drone from flower to flower, rubbing the horsehair against pistils and stamens. Like the adhesive in a Post-It note, the gel is tacky but not sticky, so it releases some of the pollen grains on contact.

Next Steps

Miyako's team published the results of its pollination gel research in the scientific journal *Chem* in February. He's seeking a $1 million grant to conduct further experiments with farmers and hire a roboticist to develop autonomous drones. Guido de Croon, scientific coordinator of the Micro Air Vehicle Lab at Delft University of Technology in the Netherlands, which has built the world's lightest driverless drone to date, says self-directed pollinators are probably a couple of years away from lab testing but will be a hot commodity once they're ready. "You could sell systems all over the world," he says. —*Nick Leiber*

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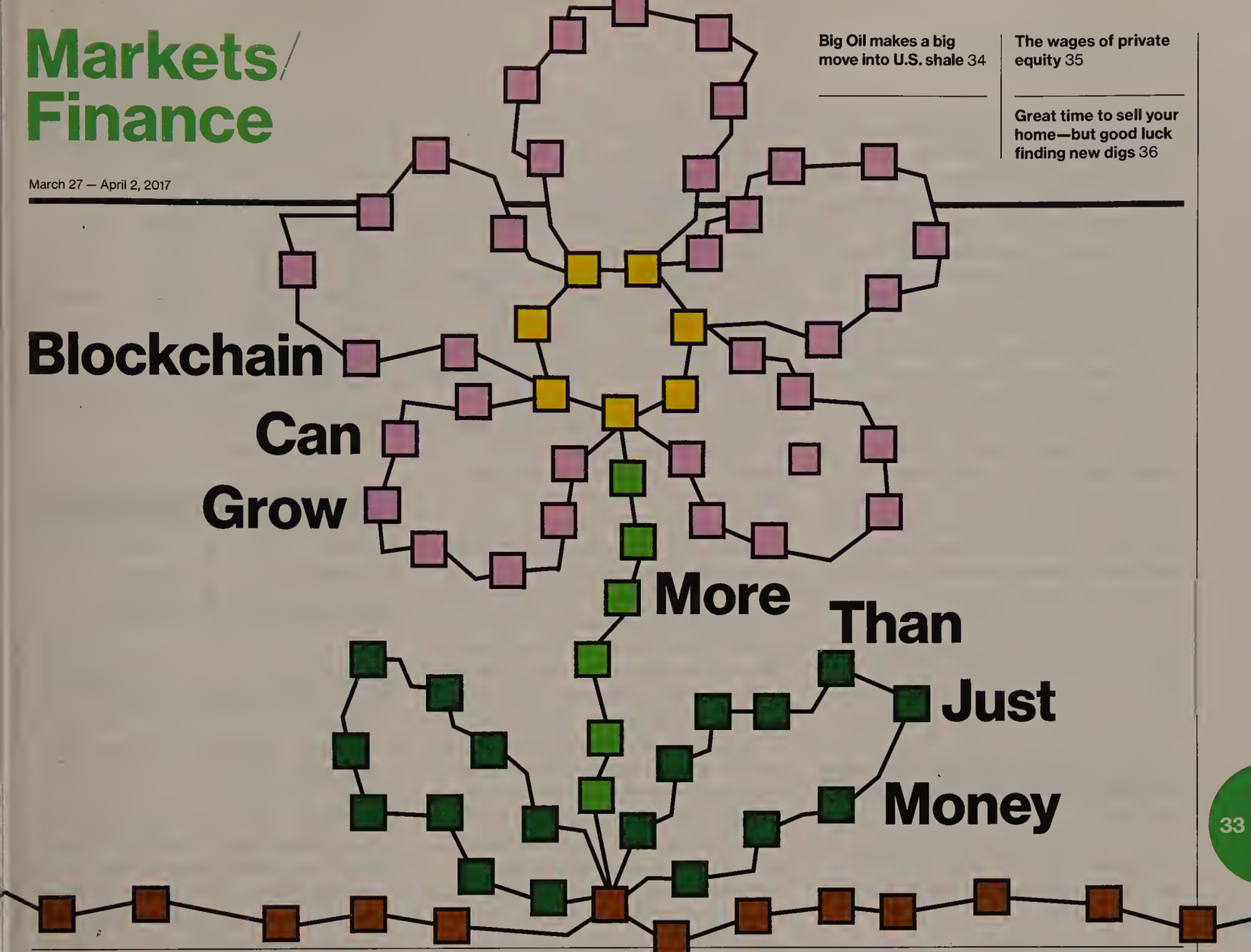
Big Oil makes a big move into U.S. shale 34

The wages of private equity 35

Great time to sell your home—but good luck finding new digs 36

Blockchain Can Grow More Than Just Money



▶ Why banks and big companies are still interested in Ethereum, even after a $60 million hack

▶ "We've built an unstoppable, uncensorable world computer"

In late February about 200 executives, coders, and developers gathered in the downtown Brooklyn office of **JPMorgan Chase & Co.** to hear an all-day pitch for a new industry group called the Enterprise Ethereum Alliance. Ethereum? It's the ghostly sounding name for a so-called blockchain technology similar to the one that made the digital currency bitcoin possible. Its inventor, Vitalik Buterin, released his software to the world in 2015, not long after dropping out of the University of Waterloo, in Canada. Less than two years later, JPMorgan, **BP**, **Microsoft**, **International Business Machines**, and **ING** are among the companies in the group experimenting with it.

Buterin didn't attend the EEA meeting, but he had a video message to deliver. Except the EEA couldn't get the video to play, because the computer hosting it crashed. As the crowd began to stir, a frozen frame of Buterin's face came on-screen, then he disappeared. After the tech crew scrambled for 30 minutes, they finally got it to work.

It's an apt metaphor for a technology that's come with enormous promises but suffered setbacks almost from its inception. Last year, hackers stole $60 million worth of ether, the digital currency linked to Ethereum. The heist was a huge black eye—chances are, if you've heard about Ethereum, it's because of the hack. And yet it isn't dead. The reason: Unlike bitcoin, this blockchain isn't really about currency. Its advocates think it could be a universally accessible machine for running businesses.

"Ethereum gives you a new way for the computer to interact with the real world and how money moves," says Emin Gun Sirer, an associate professor of computer science at Cornell University. "It's potentially a huge game changer whose value has yet to be tapped."

To understand what the excitement is about, it helps to start with bitcoin, because without it, there would be no blockchain. Previous attempts to create digital money that could be sent as easily as email ran into a problem: How do you guarantee that each virtual dollar is unique, so the sender can't spend the same cash more than once? For bitcoin, this is solved with blockchain, which is simply an online ledger book that's distributed on computers around the world. It tracks and verifies every use of bitcoin. To give people an incentive to maintain the blockchain on their machine, it awards a number of new bitcoins to the first computer to verify a transaction. It's like a banking system that runs itself—but its main ▶

◀ use is just letting people move currency from point A to point B.

Ethereum's ledger does more. It can store fully functioning computer programs called smart contracts: If person A performs job B for company C, it will trigger a payment of D back to A...and so on. As with bitcoin, the ether currency is a lure to get people to lend the system their computing power, and you need it to participate in a contract. Think of Ethereum itself as a way for people to make agreements and automate enforcement, all on a distributed network of computers. Once you can create contracts—which in essence are just operating procedures—you can use them to manage almost any kind of enterprise or organization.

For example, **John Hancock Financial** is experimenting with a tailored version of Ethereum to keep track of compliance with know-your-customer and anti-money-laundering regulations in its wealth management unit. Airline industry giant **Airbus SE** wants to know if its supply chain management can be shifted to a blockchain. Like David Hasselhoff, Ethereum is popular in Germany: Power producer **RWE AG** and online bank **Fidor Bank** are investigating ways to integrate it into their businesses.

Buterin

The 2016 ether theft showed that though Ethereum may be powerful, it's still new and prone to mishaps. One of the first things people used ether for was to invest in a kind of decentralized venture capital fund built with an Ethereum smart contract. Investors could vote on how the fund's ether would be used; hackers found a bug in the contract that forced the fund to funnel its ether to them.

After much consternation, there was a vote in the Ethereum community, supported by Buterin, to edit the blockchain's transaction history so it appeared as if the hack had never occurred. Blockchain purists were so enraged at the idea of fiddling with the ledger, they began supporting an alternative form of Ethereum, which they took to calling Ethereum classic.

Think of Ethereum as a way for people to make agreements and automate enforcement

Buterin is unapologetic. "In general, the Ethereum community is on board with the notion that we do not have to do things exactly the way that things are done in other crypto communities," he says. "I did not create Ethereum to let hackers get away with $60 million."

This is the stuff of passionate debates on Reddit forums, but it may not matter to corporate users, because many of them don't want to work on the fully public Ethereum blockchain anyway. JPMorgan just released a version of Ethereum known as Quorum. Developers around the world can work with it, but only companies invited to participate will be able to record transactions and contracts on it. The Airbus blockchain would be similarly walled off.

These blockchains would run alongside the main version of Ethereum, which anyone can use. "We've built an unstoppable, uncensorable world computer," says Joe Lubin, founder of **ConsenSys**, a Brooklyn company that develops blockchain applications, speaking of Ethereum. Andrew Keys, head of global business development for the company, still sees the technology as a grass-roots tool for cutting out intermediaries of all kinds—from law firms to online social networks. "Our digital identity is on Facebook, and Mark's getting paid," he says, referring to **Facebook Inc.** co-founder Mark Zuckerberg. "Instead of them housing that, we'll have self-sovereign identity with peer-to-peer transactions." In other words, instead of using Facebook to control who can and can't see their family photos, people could one day set the rules themselves using smart contracts.

Ethereum is still a long way from that kind of success in either its public or private forms. The public version needs significant upgrades to be able to handle anything like the volume of interactions on the internet today. Ethereum's leaders, in their response to the hack, offended a substantial part of the blockchain development and programming community, which isn't that big. On the business side, corporations have to be convinced that they won't be giving away trade secrets through their use of a ledger shared with other companies. At the same time, they'll need to keep the technology open enough so that anyone can put their ideas into the same Ethereum ecosystem. "I don't want to build AOL," says Amber Baldet, blockchain program lead for JPMorgan. "I want to build the World Wide Web."
—*Matthew Leising*

The bottom line Ethereum could present a whole new way to run a business, but there are some serious kinks to work out.

Energy

Fat Wallets Come To the Shale Patch

- **Shell and Chevron are picking up where wildcatters left off**
- **"We can see production above 700,000 barrels a day"**

Big Oil is muscling in on shale country. For example, there's a project called Bongo 76-43, a well being drilled 10,000 feet beneath the table-flat West Texas desert. It extends horizontally for a mile, blasting through rock to capture light crude from the sprawling Permian Basin.

While the first chapter of the U.S. shale revolution belonged to wildcatters like Harold Hamm and the late Aubrey McClendon, who parlayed borrowed money into billions, Bongo 76-43 is financed by a deep-pocketed major, **Royal Dutch Shell Plc**. Some of the world's top oil companies—including Shell, **Exxon Mobil Corp.**, and **Chevron Corp.**—plan to spend a combined $10 billion on shale projects in 2017, up from next to nothing only a few years ago.

If these efforts succeed, they'll scramble the U.S. energy business and boost American oil production. That would also help keep fuel prices low and steal market share and influence from Saudi Arabia and other big producers.

Operations have gotten faster and more efficient. "We've turned shale drilling from art into science," says Cindy Taff, Shell's vice president for unconventional wells. Traditionally,

Digits

1,057

The number of **hedge funds** liquidated in 2016, according to data released by Hedge Fund Research Inc. on March 17, the most to close since 2008. Investors are pulling money out of funds after years of lackluster performance.

oil companies have drilled one well per pad—the flat area they clear to put in the rig. At Bongo 76-43, for the first time, Shell is drilling five wells in a single pad, each about 20 feet apart. That will save money otherwise spent moving rigs from site to site. Shell says it's able to drill 16 wells with a single rig in one year, up from six in 2013.

With multiple wells on the same pad, one crew can work several weeks consecutively without having to travel from one pad to another. At the new well in West Texas, Shell is using three times more sand and fluid to break up shale, aka fracking, than it did four years ago. The company spends about $5.5 million per well in the Permian, down almost 60 percent from 2013.

For years, the major companies paid little attention to shale, instead focusing on their usual turf: multibillion-dollar engineering marvels in the middle of nowhere that took years to build. The wells drilled by Big Oil were mostly in deep water, where a single hole can cost $100 million, vs. a shale well, which can be set up for as little as $5 million.

That all changed after oil prices crashed in 2014. Large companies were forced to cut costs and focus on projects that delivered cash quickly and could easily be sped up or slowed down. Shale was their solution. "The arrival of Big Oil is very significant for shale," says Deborah Byers, U.S. energy leader at consultant EY in Houston. "It marries a great geological resource with a very strong balance sheet."

The Big Three have all hatched ambitious catch-up strategies. Shell plans to devote about $2.5 billion a year to shale, or about one-tenth of its total spending—a larger investment than those of some pure-play shale companies, such as Hamm's **Continental Resources Inc.** Chevron estimates its shale output will increase as much as 30 percent per year for the next decade, with production growing to 500,000 barrels a day by 2020, from about 100,000. "We can see production above 700,000 barrels a day within a decade," Chief Executive Officer John Watson told investors this month.

Exxon invested big in shale when it bought **XTO Energy Inc.** in 2010, in a deal valued at $41 billion. It plans to spend one-third of its drilling budget this year on shale. The company doubled its Permian footprint with a $6.6 billion acquisition of properties from the billionaire Bass family. Darren Woods, Exxon's new CEO, says shale isn't "on a discovery mode, it's in an extraction mode."

Although oil prices have climbed back from supercheap levels in early 2016, they're starting to reflect rising U.S. output. West Texas Intermediate, the national benchmark, dropped in March below $50 a barrel for the first time this year, down 10 percent from its 2017 peak. U.S. domestic production is likely to top 10 million barrels a day by December 2018, a level surpassed only twice, in October and November 1970, according to the U.S. Energy Information Administration.

Greg Guidry, head of Shell's shale business, says the company can make money in the Permian with oil at $40 a barrel, and new wells could be profitable at about $20 a barrel. But some investors remain unconvinced that shale is the right move for the majors. Huge projects, their mainstays, require a big upfront investment, but they become cash cows for decades with relatively little spending. Shale, on the other hand, requires ongoing spending because output quickly falls after an initial burst.

A lesson of the oil-price crash for producers was the importance of keeping cash on hand. The independents typically overspent, taking on debt to keep drilling, so when prices fell, they slowed their operations. The Big Three will experience no such pinch, says Bryan Sheffield, the third-generation oilman who heads **Parsley Energy Inc.** "Big Oil is cash-flow positive, so they can take a longer-term view," he says. "You're going to see them investing more in shale." —*Javier Blas*

The bottom line Three major oil companies are planning to spend a combined $10 billion on shale drilling in 2017.

Private Equity

Payless Flops, But the Owners Get a Payday

- **How buyout shops get paid by pushing companies into debt**
- **"Then it's just gravy, and they just keep re-levering it"**

The **Payless Inc.** shoe company was already on its way to becoming another retailer felled by the internet when the private equity guys showed up and acquired it in 2012. **Golden Gate Capital** and **Blum Capital** weren't able to turn Payless around. But the buyout firms still made out handsomely.

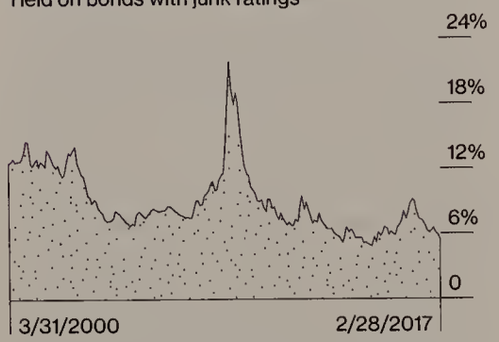
Payless is closing hundreds of stores as it struggles to repay $665 million of debt. Golden Gate and Blum have nonetheless turned a profit on the deal by having Payless borrow millions in the financial markets, a move that's pushing the company to the brink. The firms have collected $350 million from Payless through debt-funded special dividends. Golden Gate and Payless declined to comment, and Blum didn't respond to requests.

While private equity firms have long financed buyouts by having ▶

ILLUSTRATION BY TOI

Weak Companies Can Still Borrow Cheaply

Yield on bonds with junk ratings



DATA COMPILED FROM THE BLOOMBERG BARCLAYS U.S. CORPORATE HIGH YIELD BOND INDEX

◀ companies borrow, they're layering on subsequent debt at an unprecedented clip to pay themselves. Years of rock-bottom interest rates have left yield-starved investors willing to lend cheaply, and the practice helps to keep the buyout machine humming. If a firm can show its investors it's generating returns from the companies in its portfolio, even the struggling ones, then it has a far greater chance of raising new money, says a senior private equity executive who didn't want to be identified discussing strategy.

From the start of 2013, private equity owners have taken out more than $90 billion in debt-funded payouts, according to data compiled by LCD, part of S&P Global Market Intelligence. This puts a financial strain on their newly acquired companies. "Private equity firms are hastening the demise of companies that are already troubled by siphoning off money for themselves," says veteran litigator Ronald Sussman, who's represented creditors in retail bankruptcy cases.

The signature Wall Street business of this century has reshaped companies big and small and, some say, ushered in a new era of American capitalism. In a testament to the industry's growing influence, several prominent figures, including Stephen Schwarzman of **Blackstone Group LP**, are advising President Donald Trump.

How private equity investors make money is often dictated by the markets. If investors are clamoring for new stock, a buyout firm can sell equity shares in its businesses. If not, the companies in a private equity portfolio can be recapitalized through a debt sale to generate a dividend for the owners. "You just sell them if the sale market is good, and if not, you recap them, and you make money that way," Schwarzman told analysts during a 2015 conference call. "So we just sort of go with the flow, if you will."

Private equity firms have generated 14 percent annualized returns after fees in the past five years, according to Cambridge Associates' U.S. private equity index. That's almost double the 7.4 percent return for high-yield bonds in the same period.

Retailers just endured one of the worst holiday seasons in memory, with earnings in the fourth quarter declining for the third time in four years. As the whole industry stumbles, with chains closing stores and many filing for bankruptcy, some companies are getting choked by the borrowing that followed a private equity buyout.

Investors point to the collapse of department-store chain Mervyn's in 2008 as a watershed. Just four years after private equity firms led by **Sun Capital** bought it from Target Corp., the chain was forced to shut its 175 locations and cut 18,000 jobs. Sun Capital and its partners, including **Cerberus Capital Management**, paid themselves $200 million by borrowing money through the retailer. "They were after the dollars and evidently came out quite well," says Mervin Morris, 96, who founded the chain in 1949. "They broke my heart."

Doug Allen, a spokesman for Sun Capital, says the firm sold three retailers last year that remain thriving businesses even after they distributed cash to investors through debt-funded dividends. "As we can see across the current retail landscape, the business challenges that lead to a Chapter 11 filing are often broader and more systemic than a decision to return capital to investors," he says.

In 2014, **Lone Star Global Acquisitions** took a $180 million dividend from the balance sheet of Southern supermarket chain **Bi-Lo Holdings LLC** just as its prospects began to falter. The grocer's 2013 bonds, which were used to fund an earlier payment to Lone Star, are now trading at around 50¢ on the dollar. The same year, **Nine West** borrowed $445 million, partly so private equity firm **Sycamore Partners** could reduce its equity stake in the shoe retailer. And just this March, 102-year-old regional department-store chain **Gordmans Stores Inc.** filed for bankruptcy, four years after Sun Capital had it borrow money to pay Sun a dividend. Representatives of Sycamore, Cerberus, and Lone Star declined to comment.

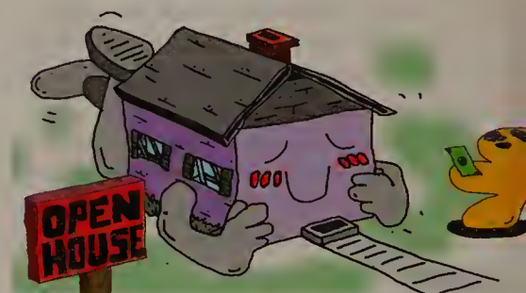
Retailers usually borrow for dividends while they're still making money. That enables the private equity firm to pay down debt and then borrow more, a process called re-levering, says Frank Maturo, vice chairman of equity capital markets at UBS Group AG in New York. The buyout firms "keep taking out dividends, so they've gotten all their investment back," he says. "Then it's just gravy, and they just keep re-levering it."

It isn't until later, after sales sag, that it becomes apparent the company is carrying too much debt. "You can lever up an asset tremendously and return that cash back to shareholders in a heads-I-win, tails-you-lose," says Brent Beshore, who runs Adventur.es, which buys equity stakes in small private businesses. "It's a great gig if you can get it." —*Nabila Ahmed and Sridhar Natarajan*

The bottom line The Payless shoe store chain's debt ballooned to $665 million as it paid its owners $350 million in special dividends.

Real Estate

The Housing Crunch Hits the Heartland



▶ **Jobs are coming back, but where are the new homes?**

▶ **"Many buyers think the trough in rates is over"**

The winning bidder for a Grand Rapids, Mich., house was offered almost $20,000 to hand his purchase contract to another buyer. An agent in Nashville got a property for his client by cold-calling local homeowners. And near Columbus, Ohio, it took a

teacher five tries to clinch a deal to buy a house.

It's the spring home-selling season, and listings in the U.S. are scarcer than they've ever been. The bidding wars common in perennially hot markets such as Boston, Denver, and the San Francisco Bay Area are now prevalent in the once slow-and-steady heartland. "Homebuyers are going to find this spring that, in a lot of markets, the inventory of homes priced and sized at price levels they were hoping for will be very limited," says Thomas Lawler, a former Fannie Mae economist who's now a consultant on housing issues. "Unlikely places are getting significantly tighter."

An improved job market is colliding with a lack of new homes. Construction starts remain well below levels before the last recession, and builders have focused on higher-end properties out of reach for many. Homeowners have become even more reluctant to sell because, after all, where will they move?

The three months through January had the fewest homes on the market on record, according to an analysis by Trulia. Prices jumped 6.9 percent in January from a year earlier, the biggest increase for any month since May 2014, show data from CoreLogic Inc. And homes sold faster in the first two months of 2017—spending an average 58 days on the market—than at the start of any year since at least 2010, according to brokerage Redfin.

Houses are moving fastest in Denver, Seattle, and Oakland, Calif.—areas where heated competition has become the status quo in recent years because of soaring job growth, particularly in the technology industry. But Grand Rapids, Michigan's second-largest city, is fourth on Redfin's list. The city has a diverse economy underpinned by health-care, technology, and manufacturing companies—and a 3 percent unemployment rate. It's seen a 27 percent drop in homes for sale in the past year. One recent listing attracted 40 bids.

Competition is so extreme that real estate agent Tanya Craig, working with an out-of-town couple six months into their search, had to get creative. She called an agent representing a buyer who'd just signed a contract for a $350,000 house and offered about $18,000 in cash if her clients could purchase it instead. She's waiting to hear back.

Moreover, would-be purchasers have reason to feel rushed. Rents are at a record high, making ownership look more attractive while borrowing costs are low. But rates have been rising. The 30-year fixed mortgage rate has jumped more than half a percentage point since the election, to 4.3 percent. The Federal Reserve on March 15 increased its benchmark interest rate by a quarter-point and signaled it will do so two more times this year.

Higher mortgage costs could eventually shrink the pool of buyers, but they may also discourage homeowners from selling, because they might have to take out a more expensive loan to buy something else. "In today's market, many buyers think the trough in rates is over," says Sam Khater, deputy chief economist at CoreLogic.

Older people who may typically move are choosing to stay where they are, says Chris Herbert, managing director for Harvard University's Joint Center for Housing Studies. "That could be part of the glue keeping the market stuck," he says.

There are pockets of the country, such as Miami and Manhattan, where inventory has climbed, thanks to new construction; and other regions have yet to experience the job gains that fuel housing demand. But other cities that haven't had strong price gains in recent years are seeing a big jump.

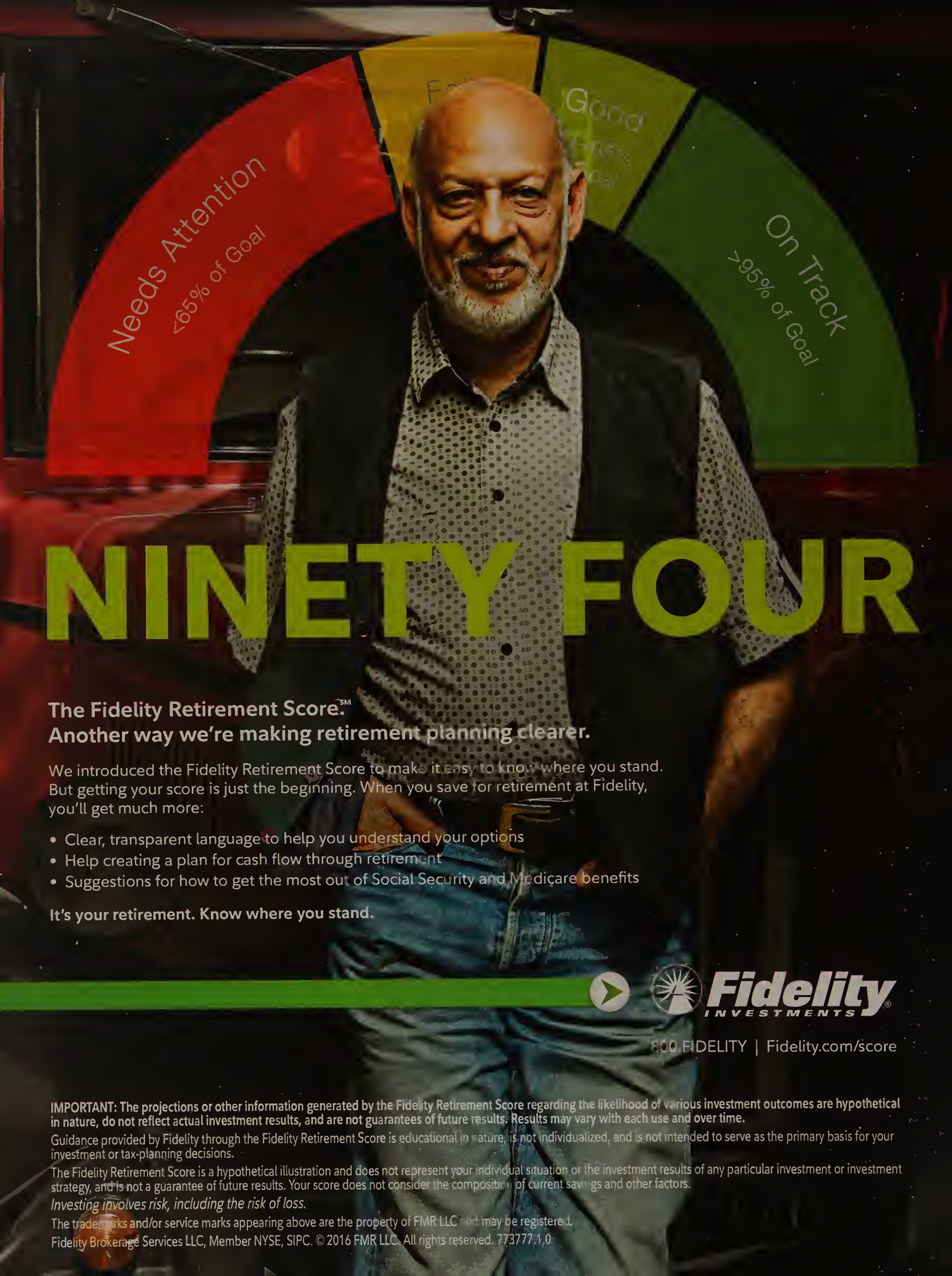
In Philadelphia, prices for single-family houses jumped 11 percent in the fourth quarter from a year earlier, compared with a gain of less than 5 percent at the end of 2015, according to Kevin Gillen, a senior research fellow at Drexel University. Buyers are making high offers before properties have even been listed, says Mike McCann, associate broker with Berkshire Hathaway HomeServices Fox & Roach Realtors.

Rich Ramsey, an agent with the Helton Real Estate Group at Keller Williams in Nashville, has been knocking on doors and working the phones. When he heard from a family frustrated after losing out on two homes they liked in a townhouse development in the city's Midtown neighborhood, he started calling owners in the area. "I found someone who had considered selling," Ramsey says. "I asked if they had a price in mind, and we started negotiating." The family purchased the three-bedroom property in January, he says.

Jessica Streit, a 42-year-old teacher and mother of two, searched for months for a home in Sunbury, Ohio, north of Columbus. She lost three bidding wars and even went into contract on a home, only to back out after an inspection revealed some expensive problems. In March her fortunes changed—she signed a $136,000 deal for a two-bedroom condominium with a finished basement. "We were absolutely shocked to get this one," she says. "We had an appointment to see a rental house Saturday, because we thought that would be our next direction." —*Prashant Gopal*

The bottom line An improving economy has people confident enough to buy. But would-be sellers wonder if they can find a better home.

Edited by Pat Regnier
Bloomberg.com



NINETY FOUR

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Kameel Khan and
Mary Ittelson

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March 27 — April 2, 2017

Welcome Freshmen!

▶ Stanford has a program to help high-achieving professionals find a new purpose in life

▶ "People approaching traditional retirement age want to keep contributing"

As senior vice president for HP Inc.'s laser-jet business unit, Pradeep Jotwani put in 70-hour workweeks and traveled tens of thousands of miles each year, leaving him little time for much else. So when he turned 60 two years ago, he was ready to wrap up his 28-year career at HP. Yet he dreaded the thought of retiring.

Then he heard about Stanford University's Distinguished Careers Institute, a yearlong program for executives and professionals mostly in their 50s and 60s who, like him, were grappling with what to do after ending successful careers. In January 2016 he began attending classes and seminars at one of America's most selective universities as part of a group of 25 DCI fellows, each of whom paid $65,000 for the privilege. "I'm a closet nerd and always wanted to go back to school and learn new things, plus I got to be with people my age who want nothing to do with retirement," he says. "We were all in exploration mode, trying to figure out what we wanted to do next, and we had the chance to share that journey."

It's like an older person's version of a gap year. Just as some young students take a break before starting undergraduate or graduate studies, growing numbers of baby boomers want to return to school after making their mark in their chosen profession. Many want to gain knowledge in subjects they didn't learn earlier in life or which didn't exist when they were in college. And they hope a break from the work they've done for two or three decades will help them find new directions.

Dr. Phil Pizzo, the 71-year-old pediatric oncologist and former Stanford School of Medicine dean who conceived and launched the DCI program in 2014, embraces the "gap year" label. "Moving from middle to older age is a gigantic transition, especially as people approaching traditional retirement age want to keep contributing and working in different ways and don't want to be isolated," he says. "We've structured this so fellows can bond and become friends and also mix with undergraduates."

Pizzo hopes DCI spurs other colleges to offer similar programs, especially some that are less costly and available to more people. Some universities ▶

Stanford hosts lunches and other events to help its DCI fellows bond

◀ might offer two-month summer programs or weekend courses scattered across an academic year.

"Fifty years from now, no one's going to think of universities as places just for people in their teens and 20s," says Laura Carstensen, director of Stanford's Center on Longevity, with which DCI is affiliated. "If you're going to live to 100 or older, you're likely going to have to return to school several times as an adult to learn what's new."

Harvard Business School already has its Advanced Leadership Initiative. Introduced in 2008, it's a yearlong program aimed primarily at executives who want to lead nonprofits or do social impact investing. Applicants for one of the 46 spots must submit a specific project they want to develop.

Stanford's program is less structured and doesn't require applicants to have a particular study plan or goal. It also invites fellows' spouses or life partners to participate—for an extra $30,000.

To help the fellows bond, the university hosts Wednesday afternoon meetings for fellows, in which they are asked to talk about experiences that most shaped them, including where and how they were raised and what personal losses they've experienced. "We want people who are willing to step out of their comfort zones and share who they are with one another," says Kathryn Gillam, DCI's executive director.

That approach suited David Gensler, 58, who was a fellow last year after he stepped down as co-CEO of Gensler, an architecture and design firm whose extensive client roster includes Apple, Airbnb, and Uniqlo. "My 81-year-old father is still working there half time, but I was completely burned out and needed to step away, have time to reflect, and find a new track for my next 20 or 30 years," he says.

He mapped out three study areas for his year at Stanford. "Just for joy," Gensler says, he took piano and voice lessons and music theory and then studied guitar, which he's now playing several hours each day. "It's my meditation," he says.

Gensler, who owns a vineyard in Northern California, also took courses in food security, soil science, and other topics in agriculture. He studied real estate development and investing at Stanford's business and engineering schools. He did the required work for all his classes and took some exams but says he enjoyed not having to worry about a grade. Since finishing his year at Stanford, he's been developing two ideas for new businesses and serving on several nonprofit boards.

Colleges that allow older adults to audit courses typically require them to only listen and not participate. At Stanford, most professors encourage DCI fellows to join in discussions.

Mary Ittelson, a current DCI fellow and head of Ittelson Consulting, a Chicago firm that advises arts organizations, wondered if she should "hold back" when she enrolled in a course on women poets with about a dozen undergraduates. But she was encouraged to participate, and "the discussions we have in class are so stimulating, they're continuing when we meet on campus," says Ittelson, 60. She found out about DCI on an airplane, when she and the man seated next to her talked about their colleges and she said she was jealous of undergraduates. "It turned out he was on DCI's advisory committee, and when he told me about the program, I said, 'That's my dream.' "

For 63-year-old Susan Wilner Golden, who slowed down her career as a venture capitalist when she was in her 40s and 50s to raise her two daughters and care for her mother, the program has been a bridge back to full-time work. "I reset my clock. I feel like I'm 30 now," she says. A DCI fellow last year, Golden is now a fellow at the Center on Longevity.

Jotwani, the HP retiree, studied renewable energy, climate change, social venture management, and art history. He's currently mentoring social venture entrepreneurs in India, Myanmar, and Tanzania, and serving on several corporate and nonprofit boards. But he liked being back at school so much that he enrolled for an extra year at DCI—and is encouraging others his age to go back to school. "I have a retiree friend who this term registered with me for a continuing education class because he realizes he needs more than golf and biking," Jotwani says. —*Carol Hymowitz*

The bottom line A Stanford University program for older adults may be a model for other schools seeking to diversify their revenue sources.

Health Care

Time to Rethink Early Retirement

- **Trumpcare would raise insurance costs for many older Americans**
- **"I would have to consider selling our home"**

After decades of saving diligently, Dan Maize, 53, of Williamsburg, Va., made the decision last year to retire early. He stayed at his job, managing a grocery chain, until February—just before Republicans in the U.S. House of Representatives unveiled a healthcare bill that could make his early retirement much harder to afford.

Under the American Health Care Act, the Obamacare overhaul that faced a congressional vote on March 23, costs could fall for many younger Americans. The majority of older people would pay much more, according to the nonpartisan Congressional Budget Office and others who analyzed an early version of the legislation. "People who are thinking about retiring may need to give serious thought to whether they can find affordable health insurance," says Tricia Neuman, director of the Kaiser Family Foundation's program on Medicare policy.

Being able to afford health care has always been a concern for older people, who are far more expensive to insure than the young. That's why Medicare, which covers Americans 65 and older, was created in the 1960s. Nevertheless, millions of older Americans face a gap in health coverage between the time they stop working and when they become eligible for Medicare. According to Boston College's Center for Retirement Research, about half of women retire by age 62 and half of men do by 64. "Our government needs to do something to provide some kind of a bridge between retirement and Medicare," Maize says.

Under Obamacare, retirees under 65 had new insurance options, including access to state marketplaces that sell policies with government-mandated minimum levels of coverage, as well as subsidies to defray the cost of those plans. In addition, insurers can charge older customers no more than three times what they charge younger ones.

Under so-called Trumpcare, insurers could charge their oldest customers as much as five times what they charge the young. The legislation would also change subsidies from a sliding scale– based on income and how much premiums cost in different parts of the country–to a flat credit based on age. The result is a "double whammy" for Americans age 50 to 64, says David Certner, legislative counsel for AARP, which opposes the House bill. "The older you are, the bigger the premium increases will be."

The AHCA could change substantially before it becomes law. One big area of debate among Republicans is how generous to make health-care subsidies and whether they should be aimed primarily at low-income or middle-income Americans.

In the CBO's analysis of the original proposal, the annual premium for a 21-year-old would fall from $5,100 to $3,900 by 2026 (the base year the agency chose for its calculations). The yearly premium for a 64-year-old would jump to $19,500 from $15,300.

That's before subsidies. With Obamacare, a 64-year-old earning $26,500 a year would pay $1,700 annually for premiums in 2026, or 11 percent of the total cost. Under the AHCA, that same person would have to cover 75 percent of the premium, an annual bill of $14,600.

Greg Ledbetter, a 66-year-old retiree in Redmond, Wash., figures premiums for his 63-year-old wife could double under Trumpcare and cost an extra $8,000 a year. "It will be really devastating," he says. "It could even come to the point where I would have to consider selling our home and moving into something else that I could afford."

An elite group of retirees could be better off under the AHCA. The bill lifts the income limits for tax credits. Single people 60 and older still would be eligible for at least a small credit up to an income of $115,000. The bill also repeals a 3.8 percent tax on investments for singles earning $200,000 or more, enacted in 2013 to help pay for the Obamacare subsidies. Of course, very few retirees have that kind of income. According to the U.S. Census Bureau, 13.2 million Americans age 55 to 64 aren't working. Their median income is $12,699 per year.

Starting in April, Maize and his family will be covered by a policy he purchased on the national Obamacare exchange, with subsidies that make his premiums affordable. But he knows that planning for his future health-care expenses would be just a "wild guess." Says Maize: "I wanted to retire on our own terms, not Trump's terms."

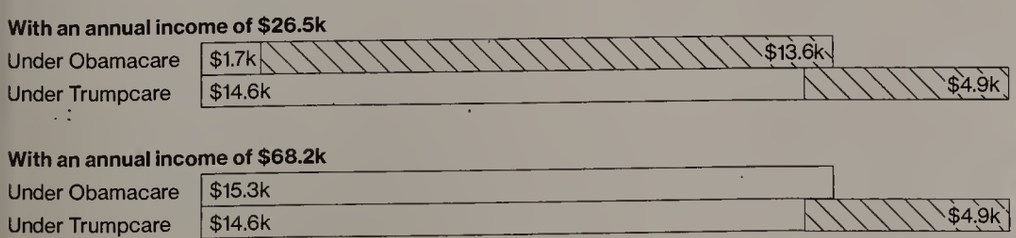
—*Ben Steverman*

The bottom line The health-care overhaul will likely make it more expensive for Americans to retire before they're eligible for Medicare.

A New Burden for Low Earners

Annual health insurance premium for a single 64-year-old

☐ Portion paid by insured ▨ Portion paid by government



Personal Finance

The Case for Not Overstocking Your IRA

- **A new book extols the value of debt and liquidity**
- **"I need Ben to have more flexibility"**

In 2016, I finally paid off my student debt. Practically every other cent left over after rent and other living expenses went into my retirement account. Was it a mistake to load up my 401(k)? Thomas Anderson thinks so. This is our story.

Compared with the average American, I'm doing all right. I have a good job, I'm saving regularly, and I'm debt-free for the first time since graduate school. That doesn't feel like nearly enough, though, not in Manhattan anyway, where everybody else seems to be enjoying $200 monthly gym memberships, $500 Broadway tickets, and $800 parkas.

Those of us not born into money, or likely to stumble into it, are stuck building wealth the old-fashioned way, over decades of hard work, good luck, and hundreds of smart choices about our careers, our investments, and even our romantic lives. There are plenty of rules to help guide you in making these choices. The one I've been sticking ▶

◀ with is pay down debt as quickly as possible while saving as much as possible for retirement.

Turns out that rule is wrong—at least according to *The Value of Debt in Building Wealth*, a new book by Anderson. A former Morgan Stanley financial adviser, he now heads **Supernova Cos.**, a firm that sells educational materials and tools to advisers. With an MBA from the University of Chicago, the 42-year-old is also the kind of guy who names his dog after a Nobel Prize-winning economist (Harry, for Harry Markowitz) and harbors a healthy obsession with mathematical concepts such as the Fibonacci sequence. "In our anti-debt world, most people are taking on too much debt too early in life and paying down that debt too aggressively," he writes. "As a result, they are not saving until later in life," when they have lost much of the power of compounding.

So maybe I shouldn't have paid off my student debt last year after all? Luckily, I could ring up Anderson in Chicago and ask him. I know him from writing about one of his previous books, which argued that individuals, especially the wealthy, should be more sophisticated in wielding debt as a financial tool.

Anderson doesn't seem to think zeroing out the student loans I'd been dragging behind me for 14 years was such a bad idea, especially compared with other far more serious mistakes I'm making—namely, locking up way too much money in my retirement accounts and investing too heavily in stocks.

> **"Most people are taking on too much debt too early in life and paying down that debt too aggressively. As a result, they're not saving until later in life."**
> ***—Thomas Anderson***

The Value of Debt contains several nuggets of pithy advice: Aim to save at least 15 percent of your income. Also, "the best way to feel rich is to live in a less expensive home than you can afford." Yet Anderson mostly steers clear of one-size-fits-all prescriptions. Instead, he divides readers into four financial profiles, from those just starting out all the way to the very rich. The key criterion isn't how much money you have. What matters—and what determines your progress from one end of the wealth spectrum to the other—is how you balance the various components of your financial life: income, savings, and debt.

It's all about getting the proportions right. If your net worth is less than half your annual income, for example, you should "avoid taking on any new debt" at all. If you're in Anderson's second phase, more or less where I land, you should aim for: no "oppressive" debt; a cash reserve six times your monthly gross income; retirement savings six times your monthly income; and last but not least, you should have a separate pot, for "big life changes," like marriage or buying a home, equal to nine times your monthly income.

Filling out the book's worksheets, I was surprised to learn I'm woefully short of cash, with less than half of the money recommended. Most surprising was seeing that I had in my 401(k) and individual retirement accounts three times what Anderson recommends.

"I need Ben to have more flexibility," he says, referring to me. That means more cash and more after-tax investments that I can sell during an emergency. What if I lose my job during an economic downturn? "You're not going to want to take just the first job that comes up," Anderson says. "You're going to need to ride it out" for three months, six months, or even longer.

Liquidity, the ability to access your money when you absolutely need it, is a key concept for Anderson. A thousand dollars in the bank is more useful than $1,000 tied up in a retirement account that charges a penalty for withdrawals—or in collectible figurines.

It isn't just about riding out a crisis. Liquidity is also important for smart investing and homeownership decisions. I tell Anderson that I, unlike my younger siblings, don't own my home. And I have 100 percent of my investments in stocks. While criticizing my investing philosophy, calling it "dangerous," he endorses my decision to rent, for now. His reasons for each are similar. Stocks and real estate are at record prices. At some point, those markets will crash. "Then you have the flexibility and liquidity to step in and buy," he says.

I've started to take Anderson's advice. I moved some of my investments out of stocks just as, luckily, equities were hitting new highs. I haven't gotten around to lowering my 401(k) contribution yet. Would the extra money in my paycheck simply inspire me to spend more? Maybe. I really should buy a warmer coat, donate more to charity, and finally see *Hamilton*. *—Ben Steverman*

The bottom line A new book cautions against paying down debt too aggressively, telling readers to build up their rainy day savings instead.

Investing

Planning for a Low-Tax, High-Deficit World

- **It's time to maximize deductions and go light on Treasuries**
- **"It's like getting to bet on a horse after the race is over"**

It isn't often that rushing makes sense in retirement planning. But when it comes to converting your tax-deferred IRA to a tax-free Roth one, Ed Slott thinks now may be the exception. "Tax rates may never get lower in your lifetime than in 2017," says the accountant and creator of the personal finance website irahelp.com. "Now would be the time to strike."

Donald Trump has said he wants to lower the top income tax rate from 39.6 percent to 33 percent. However, if history is any guide, the change won't be permanent, creating a potentially narrow window of opportunity. Savers can take a number of actions this year to cash in.

"If you have a healthy retirement account, taxes become the single biggest factor that will separate you from your retirement dreams," Slott says. If you're in the top income bracket, taxes on converting a $1 million traditional IRA to a Roth would drop from $390,600 to $330,000 if the top rate falls to 33 percent—a $60,600 immediate savings. But the savings would be even greater thereafter because assets in a Roth IRA compound tax-free, while in a traditional IRA you'd have to pay even more upon withdrawal if that $1 million grew to $2 million.

Of course, with health-care and trade overhauls on the new administration's front burner, there's no guarantee the White House and Congress ▶

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Bungalows on a Budget

- ★ Wellspring at Tamarron is a community of 109 homes for residents age **55 and older**.
- ★ Prices for the two-bedroom houses range from about **$260,000 to $290,000.**
- ★ Amenities include an **outdoor pool, fitness center, and 8 miles of walking trails.**

A Freedom home in Katy, Texas

The Essentials

By Prashant Gopal

D.R. Horton Inc., the largest U.S. builder, got such a strong reception three years ago for its Express line of entry-level homes that it decided to pitch them to seniors. The new Freedom brand targets baby boomers willing to sacrifice country-club living for a good location at the right price. The houses are about 20 percent smaller than the 2,300 square feet that D.R. Horton averages and lack higher-end shared amenities such as golf courses. Sales in the first age-restricted Freedom community, Wellspring at Tamarron in Katy, Texas, began last July. The builder expects to have at least 25 such developments by the end of September. While D.R. Horton hasn't disclosed sales figures for Freedom, Express now accounts for 28 percent of its business.

◀ will also serve up the promised tax revamp this year. "I think Republicans will do corporate tax reform this year and individual tax reform next year," says Brian Jacobsen, Wells Fargo Asset Management Corp.'s chief portfolio strategist. "They'll take care of what's possible in 2017—corporate tax reform, regulatory relief, repealing Obamacare—then leave the other stuff that's more politically popular, individual tax cuts and infrastructure spending, to right before 2018's midterm election, so it's more salient in voters' minds."

The timing of the individual tax cut won't matter as much if you've already converted to a Roth IRA this year. That's because IRA rules allow you to reverse or "recharacterize" your Roth back into a regular IRA. "If you convert today or anytime in 2017, you have until Oct. 15, 2018, to change your mind and undo it for any reason at all," Slott says. "It's like getting to bet on a horse after the race is over. It's a no-risk scenario."

If you're in the top income tax bracket, you should also consider accelerating your itemized tax deductions to claim them this year, while delaying other forms of income until the promised tax cuts come through. This won't only lessen the tax bite of the IRA conversion, it could prevent you from losing those deductions down the road. Trump's tax plan would cap itemized deductions, including those on mortgage interest and charitable donations, at $100,000 for single filers and $200,000 for married couples.

Even if those caps don't make it into the final legislation, deductions will be less valuable when tax rates are lower, points out Wendy Diamond, a tax adviser for high-net-worth clients at Deloitte Tax LLP. "If we do think rates are going down," she says, "the client should defer recognition of income and accelerate deductions, because those deductions may be worth less in a future year."

It's also worth thinking about how Republican policies might affect retirement portfolios, so you can overweight sectors and asset classes that will benefit and underweight those that will suffer from them. "A straight corporate tax cut would tend to favor small- to mid-cap companies rather than large-cap," says Jacobsen. That's because those businesses have a higher effective tax rate than large multinationals that shelter much of their taxable profits overseas. Jacobsen favors mid-caps over small. "Only about two-thirds of small-cap companies are profitable," he says. "To benefit from a tax cut, you need to be profitable. Mid-cap stocks are about 80 percent profitable."

Stocks of domestic-oriented businesses that are heavily regulated also stand to benefit more than global, lightly regulated ones under Trump's agenda. "From a sector perspective, the most heavily taxed and regulated sectors tend to be financial services, utilities, and telecom companies," Jacobsen says. These sectors, plus industrials, tend to fall on the value side of the investment spectrum, their stocks cheaper than lightly regulated peers. Deregulation may make their businesses more profitable by shielding them from consumer lawsuits and federal prosecution for fraud, safety violations, and pollution.

The outlook for bonds is mixed. Lower personal income taxes combined with greater military and infrastructure spending could spark inflation, causing interest rates to rise. That would be bad for Treasuries, whose prices, like all debt instruments, move inversely with rates.

If income tax rates decline, muni bonds could also suffer, as their tax-adjusted yields will look less attractive for investors in the top brackets. But it's unlikely that such low tax rates will last indefinitely. By comparison, top federal tax rates were 50 percent in the 1980s, 70 percent in the 1970s, and 91 percent in the 1960s.

The U.S. federal deficit continues to expand, so it seems unlikely that the 33 percent rate Trump is aiming for would hold for long. According to analysis by the nonpartisan Tax Policy Center, his plan would cause a $6.15 trillion decrease in federal tax receipts by the end of 2026. "All of this stuff Trump's planning takes money," Slott says. "At some point the bills have to get paid and taxes will snap back, maybe to 40 percent, 50 percent." When they do, you'll be glad the assets in your Roth IRA are already tax-free.
—Lewis Braham

The bottom line Act fast to Trump-proof your retirement strategy, because history shows that tax cuts often don't stick.

Edited by Cristina Lindblad
Bloomberg.com

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‘DON

Angel Ogle and her husband, Robbie Ogle, at the grave of Angel’s daughter, Regina Elsea

LET THE

IN THE AMERICAN SOUTH, AUTO PARTS WORKERS ARE POORLY PAID, BARELY TRAINED, AND UNDER RELENTLESS PRESSURE. AND THEY'RE BEING MAIMED AND KILLED

MONSTER

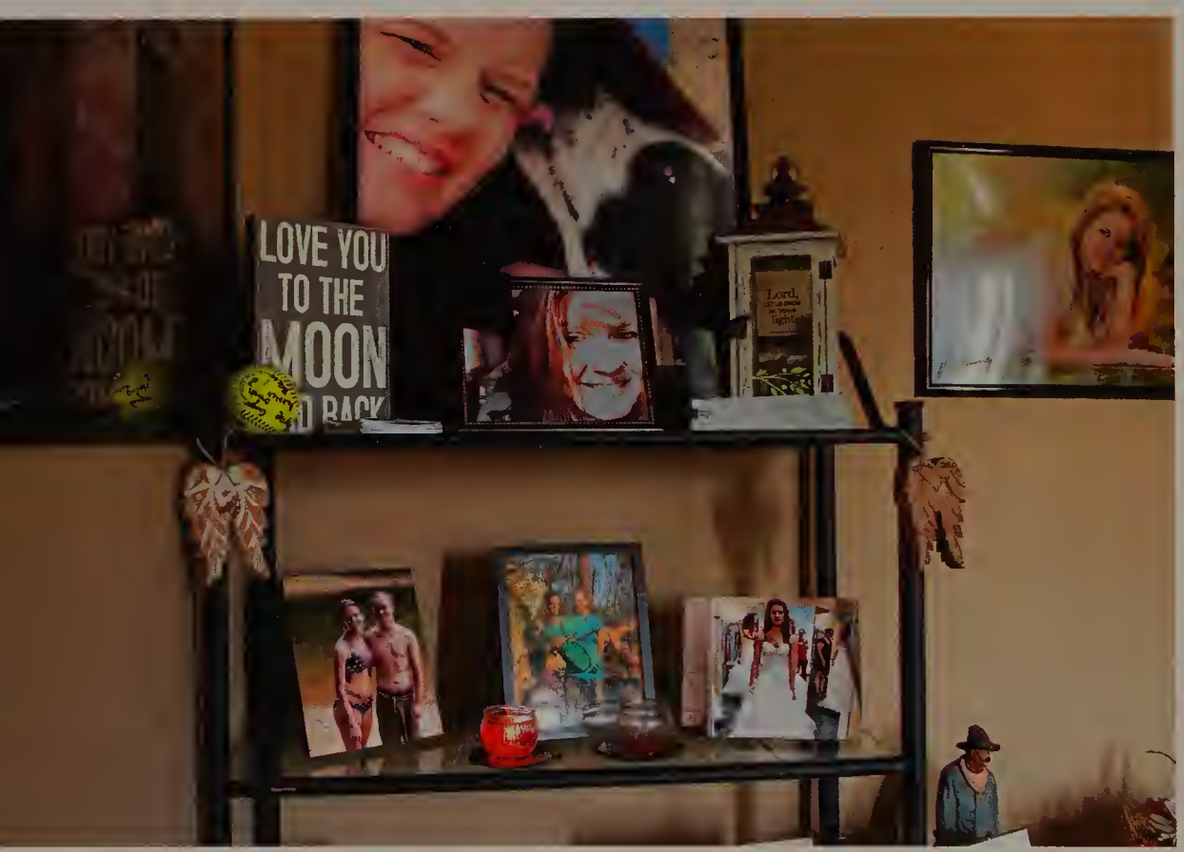
BY PETER WALDMAN
PHOTOGRAPHS BY JOHNATHON KELSO

AT YOU UP'

Regina Elsea was a year old in 1997 when the first vehicle rolled off the Mercedes-Benz assembly line near Tuscaloosa. That gleaming M-Class SUV was historic. Alabama, the nation's fifth-poorest state, had wagered a quarter-billion dollars in tax breaks and other public giveaways to land the first major Mercedes factory outside Germany. Toyota, Honda, and Hyundai followed with Alabama plants of their own. Kia built a factory just over the border in West Point, Ga. The auto parts makers came next. By the time Elsea and her five siblings were teenagers, the country roads and old cotton fields around their home had come alive with 18-wheelers shuttling instruments and stamped metal among the car plants and 160 parts suppliers that had sprouted up across the state.

A good student, Elsea loved reading, horses, and dogs, especially her Florida cracker cur, named Cow. She dreamed of becoming a pediatrician. She enrolled in community college on a federal Pell Grant, with plans to transfer to Auburn University, about 30 miles from her home in Five Points. But she fell in love with a kindergarten sweetheart, who'd become a stocker at a local Walmart, and dropped out of school to make money so they could rent their own place.

Elsea went to work in February 2016 at Ajin USA in Cusseta, Ala., the same South Korean supplier of auto parts for Hyundai and Kia where her sister and stepdad worked. Her mother, Angel Ogle, warned her against it. She'd worked at two other parts suppliers in the area and found the pace and pressure unbearable.



Pictures of Elsea in her mother's home in Valley, Ala.

Elsea was 20 and not easily deterred. "She thought she was rich when she brought home that first paycheck," Ogle says. Elsea and her boyfriend got engaged. She worked 12-hour shifts, seven days a week, hoping to move from temporary status at Ajin to full time, which would bring a raise from $8.75 an hour to $10.50. College can wait, she told her mom and stepdad.

On June 18, Elsea was working the day shift when a computer flashed "Stud Fault" on Robot 23. Bolts often got stuck in that machine, which mounted pillars for sideview mirrors onto dashboard frames. Elsea was at the adjacent workstation when the assembly line stopped. Her team called maintenance to clear the fault, but no one showed up. A video obtained by the Occupational Safety and Health Administration shows Elsea and three co-workers waiting impatiently. The team had a quota of 420 dashboard frames per shift but seldom made more than 350, says Amber Meadows, 23, who worked beside Elsea on the line. "We were always trying to make our numbers so we could go home," Meadows says. "Everybody was always tired."

After several minutes, Elsea grabbed a tool—on the video it looks like a screwdriver—and entered the screened-off area around the robot to clear the fault herself. Whatever she did to Robot 23, it surged back to life, crushing Elsea against a steel dashboard frame and impaling her upper body with a pair of welding tips. A co-worker hit the line's emergency shut-off. Elsea was trapped in the machine—hunched over, eyes open, conscious but speechless.

No one knew how to make the robot release her. The team leader jumped on a forklift and raced across the factory floor to the break room, where he grabbed a maintenance man and drove him back on his lap. The technician, from a different part of the plant, had no idea what to do. Tempers erupted as Elsea's co-workers shoved the frightened man, who was Korean and barely spoke English, toward the robot, demanding he make it retract. He fought them off and ran away, Meadows says. When emergency crews arrived several minutes later, Elsea was still stuck. The rescue workers finally did what Elsea had failed to do: locked out the machine's emergency power switch so it couldn't reenergize again—a basic precaution that all factory workers are supposed to take before troubleshooting any industrial robot. Ajin, according to OSHA, had never given the workers their own safety locks and training on how to use them, as required by federal law. Ajin is contesting that finding.

An ambulance took Elsea to a nearby hospital; from there she was flown by helicopter to a trauma center in Birmingham. She died the next day. Her mom still hasn't heard a word from Ajin's owners or senior executives. They sent a single artificial flower to her funeral.

Alabama has been trying on the nickname "New Detroit." Its burgeoning auto parts industry employs 26,000 workers, who last year earned $1.3 billion in wages. Georgia and Mississippi have similar, though smaller, auto parts sectors. This factory growth, after the long, painful demise of the region's textile industry, would seem to be just the kind of manufacturing renaissance President Donald Trump and his supporters are looking for.

Except that it also epitomizes the global economy's race to the bottom. Parts suppliers in the American South compete for low-margin orders against suppliers in Mexico and Asia. They promise delivery schedules they can't possibly meet and face

"I GAVE THEM A VERY STRONG MESSAGE... 'AMERICAN CONSUMERS ARE NOT GOING TO WANT TO BUY CARS STAINED WITH THE BLOOD OF AMERICAN WORKERS' "

Elsea was killed at this plant only a month after Ajin settled OSHA violations related to eight other workers' injuries

ruinous penalties if they fall short. Employees work ungodly hours, six or seven days a week, for months on end. Pay is low, turnover is high, training is scant, and safety is an afterthought, usually after someone is badly hurt. Many of the same woes that typify work conditions at contract manufacturers across Asia now bedevil parts plants in the South.

"The supply chain isn't going just to Bangladesh. It's going to Alabama and Georgia," says David Michaels, who ran OSHA for the last seven years of the Obama administration. Safety at the Southern car factories themselves is generally good, he says. The situation is much worse at parts suppliers, where workers earn about 70¢ for every dollar earned by auto parts workers in Michigan, according to the Bureau of Labor Statistics. (Many plants in the North are unionized; only a few are in the South.)

Cordney Crutcher has known both environments. In 2013 he lost his left pinkie while operating a metal press at Matsu Alabama, a parts maker in Huntsville owned by Matcor-Matsu Group Inc. of Brampton, Ont. Crutcher was leaving work for the day when a supervisor summoned him to replace a slower worker on the line, because the plant had fallen 40 parts behind schedule for a shipment to Honda Motor Co. He'd already worked 12 hours, Crutcher says, and wanted to go home, "but he said they really needed me." He was put on a press that had been acting up all day. It worked fine until he was 10 parts away from finishing, and then a cast-iron hole puncher failed to deploy. Crutcher didn't realize it. Suddenly the puncher fired and snapped on his finger. "I saw my meat sticking out of the bottom of my glove," he says.

Now Crutcher, 42, commutes an hour to the General Motors Co. assembly plant in Spring Hill, Tenn., where he's a member of United Auto Workers. "They teach you the right way," he says. "They don't throw you to the wolves." His pay rose from $12 an hour at Matsu to $18.21 at GM.

In 2014, OSHA's Atlanta office, after detecting a high number of safety violations at the region's parts suppliers, launched a crackdown. The agency cited one year, 2010, when workers in Alabama parts plants had a 50 percent higher rate of illness and injury than the U.S. auto parts industry as a whole. That gap has narrowed, but the incidence of traumatic injuries in Alabama's auto parts plants remains 9 percent higher than in Michigan's and 8 percent higher than in Ohio's. In 2015 the chances of losing a finger or limb in an Alabama parts factory was double the amputation risk nationally for the industry, 65 percent higher than in Michigan and 33 percent above the rate in Ohio.

Korean-owned plants, which make up roughly a quarter of parts suppliers in Alabama, have the most safety violations in the state, accounting for 36 percent of all infractions and 52 percent of total fines, from 2012 to 2016. The U.S. is second, with 23 percent of violations and 17 percent of fines, and Germany is third, with 15 percent and 11 percent. But serious accidents occur in plants from all over, according to more than 3,000 pages of court documents and OSHA investigative files obtained under the Freedom of Information Act.

Michaels, who was running OSHA when Elsea was killed, was furious when he learned how it happened. A year earlier, while attending a conference in Seoul, he'd paid a visit to executives at Hyundai Motor Co. and Kia Motors Co. to warn them that OSHA had found serious safety violations at many of their Korean-owned suppliers in the Southeast. Michaels told the carmakers they were squeezing their suppliers too hard. Their productivity demands were endangering lives, and they had to back off.

"I gave them a very strong message: 'This brings shame on your reputation. American consumers are not going to want to buy cars stained with the blood of American workers,' " says Michaels, who in January rejoined the faculty of George Washington University. "They didn't acknowledge the problem but said they were committed to safe working conditions. Clearly, they didn't make safety a requirement for their suppliers." Safety is a top priority at Hyundai's Alabama operation, says spokesman Robert Burns, who added that Hyundai promotes safety at suppliers' plants with quarterly forums and requires suppliers to comply with OSHA standards.

After Elsea's death, Ajin issued a statement saying all employees were being retrained in safety procedures. "Ajin USA is deeply saddened by the tragic loss of Regina Elsea," it said. A spokesman, Stephen Bradley, says the company can't comment on the incident because of litigation. Elsea's death "was a tragic accident, and Ajin remains deeply saddened," the company said in a written statement. "Safety continues to be our guiding principle."

Ajin had settled other OSHA violations a month before Elsea was killed. Eight workers had fingers crushed or fractured in recent years in welding machines. After the first seven injuries, Ajin's safety manager recommended installation of a machine controller called Soft Touch, which slows welding electrodes and stops them from closing together if a finger is detected. Nothing happened. Then an eighth worker smashed his thumb. For the unsafe welding machines, OSHA fined Ajin a total of $7,000.

In December, after investigating Elsea's death, OSHA fined the company $2.5 million for four "willful" citations, the agency's most severe sanction, reserved for violators that "knowingly" disregard employee safety. Ajin is contesting the findings.

The pressure inside parts plants is wreaking a different American carnage than the one Trump conjured up at his inauguration. OSHA records obtained by Bloomberg document burning flesh, crushed limbs, dismembered body parts, and a flailing fall into a vat of acid. The files read like Upton Sinclair, or even Dickens.

Last year a 33-year-old maintenance worker was engulfed in flames at Nakanishi Manufacturing Corp.'s bearing plant in Winterville, Ga.–after four previous fires in the factory's dust-collection system. OSHA levied a $145,000 fine on the Japanese company, which supplies parts to Toyota Motor Co., for a willful violation for knowingly exposing workers to unguarded machinery. The plant's maintenance chief told the OSHA investigator that he'd been too busy to write up proper lockout procedures for working on the system. The technician suffered third-degree burns all over his upper body.

Phyllis Taylor, 53, scorched her hand inside an industrial oven last year at the HP Pelzer Automotive Systems Inc. insulation plant in Thomson, Ga., while baking foam rubber linings for BMW hoods. The oven had been down for repairs earlier that day, and "there was always pressure to catch up," Taylor says. She slipped on a puddle of oil at her feet, and as she instinctively grabbed the oven in front of her, the door slammed down on her hand. She'd been telling her supervisor for weeks about the oil leak. "They don't pay you no mind; they just want you to work," says Taylor, who had skin graft surgery but still can't close her dominant hand. The plant's maintenance manager told OSHA, "The focus of this plant is production at all costs." OSHA fined HP Pelzer $705,000 for 12 "repeat" safety violations.

Nathaniel Walker, 26, had been doing the same high-wire act for three years at the factory of WKW-Erbsloeh Automotive, a supplier of metal trim parts to Mercedes and BMW, in Pell City, Ala. Every Saturday he climbed onto a ventilation duct above big dipping pools of acid on the plant's back line, where the aluminum parts were anodized to give them a protective coat. It was always a race. At first, Walker and a co-worker had 24 hours to clean and service as many of the 34 tanks as possible. As production demands rose, management cut that to 14 to 16 hours, and sometimes to as few as 6. The job required balance and dexterity. Walker and his colleague hopped on and off the 4½-foot-high ventilation shafts, hauling hoses, tools, and 50-pound bags of caustic soda. They were always exhausted–Walker worked from 3 p.m. to 3 a.m., seven days a week, for up to six months straight.

There were no gangways, no cables, no handrails. The only training the workers got from the plant's German supervisors, according to Walker, was in how to rinse off the ventilation ducts so they weren't so slippery.

In July 2014, Walker fell in. He was balancing on the duct between two tanks–one empty, one full–while using a crowbar in the empty one to remove and replace a lead cathode. His hands slipped, and he tumbled backward into a vat of sulfuric and phosphoric acid 4 feet deep. Submerged, he swam for a second before righting himself. A nearby co-worker quickly pulled him out and hosed him down, minimizing damage to his skin and eyes. Walker's cotton shirt pulled off his skin like wet tissue paper. His throat burned and swelled from swallowing the solution. He spent four days in intensive care and didn't fully recover for months.

OSHA fined WKW-Erbsloeh $178,000 and issued the company a willful violation for failing to secure the work areas around open chemical tanks. The agency had inspected WKW-Erbsloeh eight times since 2009 and issued multiple citations after another worker's arm was chewed up in a polishing machine and a third employee lost a thumb. Walker was earning $13 an hour when he fell into the acid. "I was way, way underpaid for working all the time in a risky situation like that," he says.

HE STOOD THERE FOR AN HOUR, HIS FLESH BURNING INSIDE THE HEATED PRESS. WHEN EMERGENCY CREWS FINALLY FREED HIM, HIS RIGHT HAND WAS SEVERED AT THE WRIST

Allen, with his oldest son, in Tanner, Ala.

Ray Trott, a retired U.S. Marine aircraft maintenance chief, worked for WKW-Erbsloeh as a production manager until 2015. He says the German managers didn't seem to understand the American workers and were never satisfied with what they got from them. "If you made 28,000 parts one day, the next day they'd want 29,000," Trott says. "You heard all day long, 'If we don't get these parts out, the customer is going to fine us $80,000.' "

Reco Allen, 35, took a job at Matsu Alabama to get his life together. After dropping out of high school, he'd worked briefly at McDonald's, then sold marijuana for a living. When he turned 30, with three kids younger than 6 and his wife working at Walmart, Allen decided dealing dope was no way to raise a family. "They'd see cars pulling up, hear people talking, and ask, 'Daddy what are you doing? You ain't got no job.' I wanted to better myself."

He applied at Surge Staffing, a temp agency that was hiring workers for Matsu. Allen's dad, who'd worked at the facility for a few weeks after a 30-year career making furniture at Steelcase Inc., told him to stay away—the Matsu plant was too dangerous. "Don't let the monster eat you up," he told his son.

Allen took a $9-an-hour job on the overnight shift as a janitor. He passed up higher-paying positions on the assembly line, because "the machines scared him," says Adam Wolfsberger, the former manager at Surge Staffing who hired Allen. The only training he received was where to find the mop and broom, Wolfsberger says.

On April 2, 2013, after Allen had been on the job for about six weeks, a plant supervisor ordered him to put down his broom. He assigned him to work the rest of the shift on one of the metal-stamping presses instead and admonished him not to tell anyone about the job switch. Matsu was producing only 60 percent of its parts quota and could have been fined $20,000 by Honda for every minute its shortfall held up the company's assembly line, according to a deposition by the plant's general manager at the time, Robert Todd, in a workers' compensation suit filed by Allen in state court in Huntsville.

Allen testified in the case that his only operating instructions came from a co-worker who told him: "Get these blanks out of the bin. You load them in the machine, and you make sure you get back." Stepping back was essential, not only to avoid injury but to clear the vertical safety beam, or light curtain, which is supposed to deactivate the machine if a worker is standing too close when an operator cycles it on.

At about 4 a.m., Allen, wiry and 5 feet 9 inches, was leaning inside the machine with his arms extended upward, loading metal bolts. Suddenly the die, which stamps the metal parts, slammed onto his arms. "It felt like the whole world was coming down on me," he says. The press operator hadn't noticed him working inside the machine, and Allen's frame was so slight that the safety beam missed him.

He stood there for an hour, his flesh burning inside the heated press. Someone brought a fan to cool him off. "I was just talking to myself about what my daddy had told me," Allen says. When emergency crews finally freed him, his left hand was "flat like a pancake," Allen says, and parts of three fingers were gone. His right hand was severed at the wrist, attached to his arm by a piece of skin. A paramedic cradled the gloved hand at Allen's side all the way to the hospital. Surgeons removed it that morning and amputated the rest of his right forearm to avert gangrene several weeks later.

Matsu, it turned out, had known for years that Press 10, where Allen was dragooned into working, was dangerous. Three years earlier a press operator on the plant's safety committee reported a near miss on an identical machine after the light curtain failed to pick up a worker. The safety committee recommended fixes to the vertical beam, but nothing was done, according to testimony in the court case. In 2012 a worker on that same press had his hand crushed. In response, Todd, the general manager, recommended installing horizontal beams to eliminate the blind spot in the vertical light curtains of both machines. It would have cost $6,000 to $7,000, Todd testified. John Carney, the company's vice president for operations at the time, rejected the proposal. Instead, he told Todd to install a safety bar, for $150, Todd testified. It failed to protect Allen.

After Allen's injury, Surge Staffing gathered its 80 or so Matsu workers for a meeting, says Wolfsberger, the former Surge manager. That's when the agency learned the plant had provided no hands-on training, routinely ordered untrained temps to operate machines, sped up presses beyond manufacturers' specifications, and allowed oil to leak onto the floor. "Upper management knew all that. They just looked the other way," says Wolfsberger, who left Surge in 2014 and now manages a billiards parlor. "They treated people like interchangeable parts."

An administrative law judge with the Occupational Safety and Health Review Commission approved a $103,000 fine against Matsu, ruling that Allen's injuries resulted from its "conscious disregard or plain indifference" to his safety. Matcor-Matsu did not respond to phone messages and emailed questions, nor did its attorney, John Coleman. After the commission's 2015 decision, Coleman told the *Birmingham News* the judge was mistaken and that Allen was trained but didn't follow the rules. Allen sued the company and reached a multimillion-dollar settlement out of court. He and his wife purchased 15 acres and a big house with a fish pond near the Tennessee River, prepaid their kids' college tuition, and bought a bright-green Buick Roadmaster. "I'd rather have my arm back any day," Allen says. B

THERE'S MORE THAN ONE WAY TO WEAR A wire

GUY GENTILE WAS AN UNDERCOVER WALL STREET INFORMANT FOR THE FBI. THEN HE REALLY FLIPPED

By **ZEKE FAUX**

Photographs By **JEFF BROWN**

ON

the night he cut a deal with the FBI, Guy Gentile was on his way to a Connecticut casino for his cousin's bachelor party. He'd jetted up from the Bahamas, where he was running an online stock brokerage that cleared a million dollars a year without much effort on his part. Then 36, he was a working-class kid who'd finagled his way into the dicier edges of finance, and he dressed the part, with neatly trimmed stubble, designer jeans, a silver Rolex, and sunglasses that hung from the collar of his tight T-shirt, just below a few tufts of chest hair.

Gentile was feeling edgy about traveling stateside. It was July 2012, and regulators had been making calls about a stock play he'd been involved with a few years earlier. He'd been part of a group that the FBI suspected had suckered investors out of more than $15 million by manipulating the market for shares in a Mexican gold mine and a natural gas project in Kentucky.

As Gentile's plane landed in White Plains, N.Y., he saw the flashing lights of police cars on the tarmac, confirming his fears. Before passengers could disembark, uniformed men came on board. Gentile dialed his lawyer, but the men grabbed the phone out of his hands, handcuffed him, and marched him off the plane.

Soon, two FBI agents picked him up from an airport detention room and drove him to a neon-lit diner in Newark, N.J., near their office. They bought Gentile a bacon cheeseburger and a Diet Coke and told him he had two options: Either they could throw him in jail, seize his assets, and hand his case to a prosecutor with a 95 percent win rate, or he could help them catch a bigger fish—and maybe make his problems go away. Gentile didn't need to think it over. Whatever you want, he said, I'll do it.

Normally the identity of an FBI cooperator would be kept secret, but sometime last year, a website called Rogue Informant went live. It bore the tagline "They said he had ice flowing through his veins," a picture of a man getting off a private jet, and no identifying information. A trader told me who was behind it.

When I called Gentile, it was as though he'd been waiting for me. He said he had an amazing story to tell, promising that it included celebrities and a government coverup. "Remember the movie *American Hustle*? It's kind of like that, with way more dirt and twists and f---ed-up shit," he said.

He told me that the information he'd gathered across three years had led to dozens of arrests and helped prevent hundreds of millions of dollars in potential fraud losses. That made sense, in a way. Most stock market scams are easy to spot but hard to prove—even promoters of the most dubious schemes can operate for years, taking advantage of legal loopholes, offshore hideouts, and anonymous shell corporations. Yet the Department of Justice often claims in its press releases that since fiscal 2009 it has "filed over 18,000 financial fraud cases against more than 25,000 defendants." Gentile offered a rare chance to see how the FBI is making these cases—even though, if his website is any indication, something went dramatically wrong.

AGENTS GAVE GENTILE A SE

I met Gentile at his office in Carmel, N.Y., a quiet suburb about an hour's drive north of Manhattan. It was one of the hottest days of the summer, but there was no air conditioning because he'd stopped paying his utility bills. Now 40, Gentile was about to turn the building over to his estranged wife in their divorce. His office was a shrine to rags-to-rich-douchebag movies. On one wall was a poster of Al Pacino as Scarface and another of Leonardo DiCaprio in *The Wolf of Wall Street*. DVDs of the latter and *American Hustle* were stacked on a side table. "The whole experience was very surreal. I felt like an actor in a movie," Gentile said of his work with the FBI.

We decided to find someplace less broiling to talk. In his red SUV, he put on a techno version of the James Bond theme and puffed mint-infused smoke from a vape pen. A Make America Great Again hat lay on the dashboard. As we drove, he launched into his story.

Gentile is the son of Italian immigrants. His father ran a gardening business in Mount Vernon, N.Y., and his mother worked in a sprinkler-head factory. Gentile spent his summers pulling weeds and mowing lawns; when he was old enough, he started working nights at a pizzeria. (He met his future wife there, after she left him a note while he was out on a delivery, telling him he was cute.) He was an indifferent student, more interested in making money and spending it on his silver 1985 Monte Carlo, which he fitted with a nitrous-oxide injection system and drag-raced at a track in New Jersey. He considered becoming a police officer after graduating from high school, but instead took a job as a syrup quality-control inspector at a Coca-Cola plant.

He discovered day trading in 1997, not long after E*Trade began offering the service online. A flood of websites and message boards popped up to give investors advice. Even punk rock legend Joey Ramone was giving stock tips. Gentile started his own subscription service, called DayTraderPro. For $35 a month, investors could get tips ("Don't attempt to buy the bottom or sell the top. Wait and see which way it's going") and watch a live feed of a "professional" investor's trades. The advice was basically worthless, but Gentile got in the game early enough to attract a small following. His computer would ping every few minutes to announce a new subscriber, according to Arthur Quintero, a compliance consultant who worked with him at the time.

In 1998, Gentile quit his job at Coke. He created his own trading website, an E*Trade knockoff that collected fees for executing trades. His clients weren't getting rich, but it didn't hurt his bottom line: By 2009 that company and another trading firm he'd started were netting about $3.5 million combined. Gentile drove Ferraris and Lamborghinis, including a white

convertible that a dealer told him had belonged to R. Kelly, and invested in a Miami reggae record label. He referred to his lifestyle as that of a "simple jet-setter."

After the dot-com bubble burst, U.S. regulators began implementing rules to protect clueless investors from themselves, such as requiring that day traders have at least $25,000 to their names and banning funding accounts with credit cards. With the number of prospective clients declining, Gentile decided to move somewhere with fewer regulations. He set up shop in the Bahamas in November 2011. Brokers there don't have to follow day-trading rules, and they can take American customers as long as they don't advertise for them.

The loophole gave Gentile a steady stream of business, and the offshore brokerage basically ran itself. Bored and still daydreaming about a law enforcement career, he signed up to get an online associate degree in criminal justice from the University of Phoenix and registered as a freelance bail enforcement agent with the state of Connecticut. But before he had a chance to track down any fugitives, he boarded the flight to White Plains, and the FBI presented him with a better chance to live out his fantasies.

At the diner in Newark, the FBI accused Gentile of participating in a pump-and-dump con that's as old as the stock market. Promoters take over a worthless shell company, announce that they've found a promising venture, and send out a glossy marketing brochure to thousands of potential suckers. Some investors are gullible enough to buy the whole story, while others suspect the con but think they can get in and out quickly enough to profit. Once the frenzy dies down, the stock is almost worthless and the promoters move on to their next scheme. The government had trading records showing that while Gentile was running his U.S. online brokerage, he'd promoted the Mexican gold mine and the Kentucky gas-drilling project, then dumped millions of shares at near-peak value.

Gentile maintains that he did nothing wrong. But rather than try his luck in court, he became one of the FBI's 15,000 informants, or "confidential human sources," as the bureau calls them. The FBI has been using this tactic against stockbrokers and fund managers since at least 1992, when it created its first squad dedicated to Wall Street crime after the case against junk-bond king Michael Milken brought securities fraud into the mainstream. Informants are crucial to these cases, because tape recordings demonstrating wrongdoing cut through the complexity of stock market schemes for juries. And unlike agents, informants don't require warrants to elicit evidence. Turncoats have driven some of the FBI's biggest Wall Street investigations, like the landmark insider-trading cases against Raj Rajaratnam and Steve Cohen's SAC Capital Advisors.

The day Gentile was arrested, the FBI agents who nabbed him had their eye on a lawyer named Adam Gottbetter. A regular on the Manhattan charity circuit, with a $12 million condo on the Upper East Side and an office on Madison Avenue, Gottbetter was by all appearances a Wall Street aristocrat. He favored tailored suits and kept his curly hair slicked back, flew to the Hamptons on private jets, and played in a dad band at fundraisers for the elite all-girls Spence School. Gottbetter pitched himself as an expert at taking small companies public, but the FBI suspected that he actually specialized in arranging crooked stock deals.

GENTILE HELD PASSPORTS FOR THE U.S., THE EUROPEAN UNION, AND JAMAICA, WHICH ENRICHED HIS COVER

The dozens of companies in regulatory filings that mention Gottbetter's name generally show the same pattern: A long-dormant stock spikes, then drops toward zero. By my calculations, during the time Gottbetter was listed in the filings, the companies' peak market value was $5 billion more than their collective worth now. The FBI had identified this pattern, but it needed Gentile to nail Gottbetter. The pair had worked together on the natural gas play starting in 2007. The agents wanted Gentile to get back in touch with Gottbetter and coax him into saying on tape that he'd committed a crime.

After the talk at the diner, Gentile spent the night in jail. The next day he and his lawyer sat down with an assistant U.S. attorney for New Jersey. Like most informants, Gentile didn't get a deal in writing, but he says the prosecutor promised to consider dropping the charges if he cooperated in good faith.

Shortly after being released from jail, Gentile called Gottbetter to arrange a meeting. They decided on breakfast at the members-only Core Club in Manhattan. Gentile arrived with

a recording device in the pocket of his jacket, but Gottbetter was careful about what he said and didn't want to discuss the gas deal. Instead he was eager to get Gentile's help with a new scheme.

The meeting was an adrenaline rush for Gentile. His FBI handlers seemed excited, too. They agreed to pursue Gottbetter's plan, and at the same time Gentile offered to go after other crooks, to improve the odds he'd be let off the hook. He began strategizing with the lead agent, Kevin Bradley, a tall man with prematurely white hair—the source of his nickname, A.C., for Anderson Cooper. Gentile says the two of them spoke nearly every day on the phone and met regularly at Palisades Center, a mall in West Nyack, N.Y. Gentile's handlers would identify suspicious traders and encourage him to set up meetings. He told them he'd need higher-tech gadgets to avoid detection, so they gave him a set of keys with a hidden recorder and realistic-looking Starbucks gift cards that recorded audio. He sometimes wore a white dress shirt with a button that concealed a tiny camera.

SURVEILLANCE FOOTAGE OF GENTILE (TOP), BRADLEY (BOTTOM), AND ANOTHER FBI AGENT CONFERRING IN THE BAHAMAS ABOUT THE MILRUD INVESTIGATION

At first, Gentile had a habit of coming on too strong. Among his early targets was a broker I know. He burst out laughing when I told him Gentile was an informant. They'd met at a bar, he recalled, where Gentile spoke so openly about pump-and-dump schemes that the broker asked if he was a cop and walked out. "The Oscar definitely did not go to him," the broker said.

But Gentile improved. He learned to play hard to get, waiting days to return calls and letting his targets do most of the talking. He developed a lure, telling them he'd created a trading algorithm that could swap shares back and forth among 32 accounts, at ever-higher prices, making it look like the stock was going up. The best part, he'd say, was that it was completely untraceable because he would run it through his offshore brokerage. Crooks loved the idea. "I was really just selling bullshit," Gentile says. "I'd lie to them. I was a very good liar." Sometimes he brought along an undercover FBI agent who pretended to be a financier; the aim was partly to ensure that, in the event of an arrest, someone other than Gentile could provide eyewitness testimony.

Most informants find the work scary. "Prison was a cakewalk compared to wearing a wire," says Mark Whitacre, the Archer Daniels Midland Co. executive who became the subject of the book *The Informant* after helping expose an animal-feed additive price-fixing conspiracy. "I was almost delusional from the stress." Not Gentile. Working undercover made him feel like an action hero. It fed into his love of intrigue, according to his ex-wife, Karen Barker-Gentile. "He did actually assume a new personality in which he imagined himself to be an FBI agent," she says. He began calling his operation Wall Street Underground and developed a signature move, giving each target a hug at their last meeting before the FBI moved in.

The FBI agents encouraged this grandiosity, according to Gentile. He says they let him keep his Glock pistol; that Bradley, an avid cyclist, gave him the code name "Bianchi," for the Italian racing bicycle; and that his handlers told him he was the best informant they'd ever worked with, more like an undercover agent than a cooperating witness. Gentile also kept running his Caribbean brokerage, traveling to and from the Bahamas.

As for Gottbetter, Gentile was gaining his trust. In August 2013, Gottbetter requested that they meet in the lounge at the White Plains airport. He flew in to tell Gentile about a deal centered on a shell company he and some other financiers controlled. Their plan was to use the company, which filings said grew mushrooms in El Salvador, to buy a bunch of cheap oil wells. Then they'd rename the company and hype it to investors.

The FBI's problem was that nothing Gottbetter was describing was necessarily illegal. For the scheme to cross the line into fraud, Gentile would have to persuade Gottbetter to use his fake trading algorithm. "The government instructed me to criminalize the deal," Gentile says. "I felt like I was tricking him." (The FBI declined to comment on Gentile's allegation and other facets of his account.)

Three months later, on a cold November night, Bradley and other FBI agents waited outside the Surrey, a hotel on Manhattan's Upper East Side, where Gentile's final meeting with Gottbetter was taking place. Gottbetter had with him a British man who was supposed to finance the company's oil well investments. They spent hours talking over the plan, finally agreeing that Gentile would use his untraceable accounts to make it appear as though the stock price was going up. Gentile surreptitiously snapped a picture of the investor and sent it to the agents so they'd know whom to arrest.

As they said goodbye in the lobby, Gentile pulled the investor in for a hug and kissed him on the cheek. Gentile and Gottbetter left, and the agents went into the building and nabbed the investor. They later told Gentile that he'd gotten them the evidence they needed on Gottbetter, who eventually admitted to securities fraud, paid $5 million in fines, and served about a year in prison and a halfway house. (Through his lawyer, Gottbetter declined to comment for this article, "other than to say that he has taken responsibility for his conduct, which was aberrational.")

The FBI's primary target was out of commission, but Gentile was still on the hook: The bureau wanted him to continue informing on others. He began to wonder when he'd be able to stop and whether the agents were making empty promises. And he worried about how, if they reneged on the deal, he would prove he'd been a cooperator. Gentile decided to get proof of their arrangement by surreptitiously recording his handlers. "They taught me tapes don't lie," he says.

In February 2014, Bradley and his FBI boss told Gentile that internal investigators were auditing their spending on his operations. In two years they'd spent a few hundred thousand dollars on

expenses, Gentile says, including about $15,000 for his travel. The agents told him that an investigator would be asking him some questions, and they wanted to go over what to say. They called a meeting at the Red Robin restaurant at Palisades Center. This time, Gentile brought a recording device of his own.

At the meeting, Bradley, his boss, and other agents praised Gentile's work. Bradley said he'd fulfilled his agreement with the prosecutor. "Look at how you affected this space. How many people you shut down," Bradley's boss said, while the tape (which I later heard) rolled. "We never would have gotten near those people without you." Gentile told the agents he wanted to work for the agency as a consultant one day, and they didn't shoot the idea down.

The agents went through the questions Gentile might be asked by the internal investigator, telling him not to say much. They advised him to say he hadn't directed any criminal activity. ("Of course I did," Gentile says.) And they said not to mention his gun.

When the investigator called, Gentile stuck to the script. He still doesn't know whether anything came of the inquiry. More important to him was that he had the agents on tape saying he'd held up his end of the deal. He also had what he thought was evidence of them acting unethically. Over the next year he recorded more than 100 other calls.

During that period, the agents were letting Gentile suggest his own targets. One was Nonko Trading, a rival brokerage; Gentile taped one of its employees admitting the firm had defrauded investors, and prosecutors arrested the owner. Another was a high-frequency trader named Alex Milrud. Gentile suggested the sting because, he says, Milrud once cheated him out of $70,000. Gentile lured Milrud to the Bahamas and persuaded him to show how he used puppet accounts in China to manipulate stocks. After Milrud was charged, in January 2015, the FBI issued a statement describing the alleged crime as "a sophisticated, international, groundbreaking market manipulation scheme." Milrud pleaded guilty and is awaiting sentencing; through his lawyer, he denied ripping off Gentile and otherwise declined to comment.

By early 2015, Gentile was running out of targets. That June, his worst fear came true: Prosecutors told him he'd have to plead guilty to a felony stemming from the original charges against him. They said he wouldn't serve any time in prison, but Gentile nevertheless felt betrayed. He'd delivered more than he promised, and he wanted the charges to disappear. "I kept saying no," he says. "Sorry, that wasn't the deal, we aren't taking it." Then he played what he thought was his trump card: "By the way, we also have these tapes."

Instead of forcing the prosecutors to let him go, the threat appeared to anger them. The following spring, they rearrested him and charged him for his alleged participation in the original gold mine and natural gas pump-and-dump schemes. The charges carried a maximum prison term of 20 years, but Gentile doesn't regret rejecting the government's no-jail-time offer. "Only someone who's crazy wouldn't take the deal," he says, "unless he lives his life by principles and integrity."

Gentile was allowed to remain free on $500,000 bail. He told his friends he would beat the case and met up with a rapper he'd signed to his old Miami reggae label, to make a song about snitching. On the track, Gentile raps awkwardly over a wobbly beat from a drum machine: "The feds don't know who they got, bro/ I'm going rogue." He says he dated a Puerto Rican beauty pageant winner and a "hotter girl from Spanish class." He binge-watched *Billions*, the Showtime series about a prosecutor out to get a hedge fund manager at all costs. "It's like the story of my life," he says.

For his 40th birthday last year, he threw a James Bond-themed party for 80 guests at a rented beach house in the Bahamas. Brent Mayson, one of his best friends, recalls that Gentile jumped onto a giant inflatable swan in the pool wearing a borrowed Armani jacket. "It's spring break for him every day," says Mayson, a real estate developer. "I think it's kind of adorable. He's living out his youth a little later."

Gentile obsessed over old rulings that he was convinced illustrated flaws in the case against him. His lawyers filed a motion to dismiss the case, detailing Gentile's time undercover and claiming he'd been promised he wouldn't be charged if he was successful. In response, prosecutors acknowledged that Gentile had provided useful information, but they said no one had promised him he'd get off scot-free and that the charges were merited. "What made Gentile such an accomplished criminal explains why he was such a valuable cooperator—he was deeply enmeshed in the world of stock market manipulation," the prosecutors wrote.

Gentile blames the prosecutors, not Bradley or his other handlers, for bringing the case against him. In December, Bradley came to the courtroom to watch a hearing in Gentile's case. During a break, he told Gentile that the other agents sent their regards, and they spoke about getting a beer together once the case was resolved. Bradley wouldn't discuss the allegations about the internal investigation, nor specific facets of Gentile's story. "Some of it is fairy tale-ish," he says, "but he's got a decent head on his shoulders."

A month after the hearing, Gentile was driving home from the gym when one of his lawyers called. The judge had tossed out the charges, saying the statute of limitations had expired. Gentile was so relieved he started crying. Then he posted a *Wolf of Wall Street* meme on Instagram with the caption "F--- YOU ALL." A spokesman for the U.S. attorney in New Jersey declined to say whether the office will appeal the ruling or otherwise comment on the case. Gentile still faces a related civil lawsuit filed by the Securities and Exchange Commission, seeking his share of $17 million in proceeds from the alleged schemes. He says he believes he'll prevail on the same statute-of-limitations grounds.

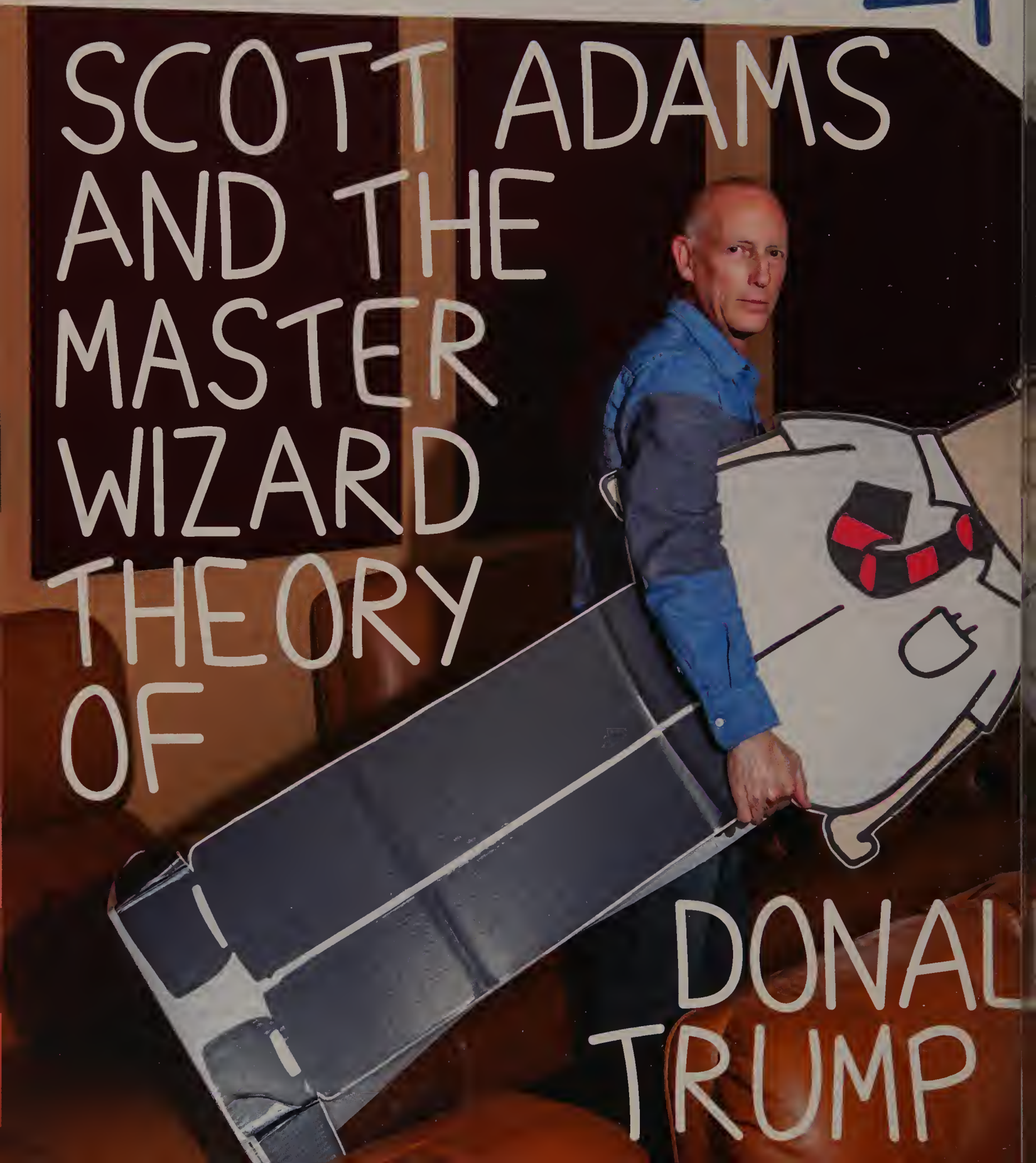
"THE FEDS DON'T KNOW WHO THEY GOT, BRO/ I'M GOING ROGUE," GENTILE RAPPED

Gentile says he feels sorry for the people he informed on, and that some of them wouldn't have committed crimes if he hadn't talked them into it. But even if his targets wouldn't have done something outright criminal, they were planning to cash in by hyping dubious stocks. Schemes like these cost investors billions of dollars every year. Gentile's methods weren't pretty, but without them, Gottbetter and the others would still be free to siphon people's savings.

Gentile isn't ready to give up the hustle. He says he intends to sue the government for damages and that one day he'd like to star in the movie of his life. His time undercover, he says, gave him the acting skills he needs. And the storyline will be straight off the posters on his office walls. "I'm going to build a billion-dollar company," he says. "I'm going to get my own private jet, I'm going to drive a flashy car. And I'm going to make my license plate F---YOUDOJ." B

COMIC TRIP

SCOTT ADAMS AND THE MASTER WIZARD THEORY OF DONALD TRUMP



In August 2015 viewers of the first Republican primary debate could be forgiven for thinking that Donald Trump was finished. "You've called women you don't like fat pigs, dogs, slobs, and disgusting animals," the moderator, Fox News anchor Megyn Kelly, said to him. "You once told a 'Celebrity Apprentice' it would be a pretty picture to see her on her knees. Does that sound to you like the temperament of a man we should elect as president?" Trump didn't act contrite, or statesmanlike, as conventional candidates might have done. Instead, he interrupted Kelly with another nasty dig, about Rosie O'Donnell, and volunteered that he'd probably insulted others, too. Many pundits proclaimed that the response cemented Trump's unelectability.

Scott Adams, the millionaire creator of the office-humor comic strip *Dilbert*, saw something different. In that moment, he realized that Trump might be a kindred spirit—a fellow "Master Wizard," Adams's term for experts in hypnosis and persuasion. Watching the debate alone at home, he grew excited. "I really got out of my chair and said, 'Whoa, there's something happening here that's not like regular politics,'" Adams recalled. As he saw it, Trump had deftly defanged Kelly's accusations by replacing them with a powerful visual: the iconic O'Donnell, "who is very unpopular among his base," Adams said. "It was the most brilliant thing I've ever seen." A week later, he published a blog post titled "Clown Genius."

With about 10,000 readers on a good day, Adams's blog had a fraction of the audience of his cartoon, which appears in 2,000 newspapers around the world, or his books of pop-business theory, which are best-sellers. But in the digital sphere, Adams was able to indulge his more outré interests and theories. Of Trump, he wrote: "There is an eerie consistency to his success so far. Is there a method to it? ... Probably yes. Allow me to describe some of the hypnosis and persuasion methods Mr. Trump has employed on you." At a time when virtually the entire professional political class was convinced Trump would self-immolate, Adams's essay reframed his actions as the deliberate work of a political savant. Trump, he wrote, was using such "Persuasion 101" tricks as "anchors," "intentional exaggeration," and "thinking past the sale" to wage "three-dimensional chess" against his opponents and the media, including Kelly and Fox News. "Now that Trump owns Fox, and I see how well his anchor trick works with the public," Adams concluded, "I'm going to predict he will be our next president."

As Trump extended his run, Adams kept pace with a near-daily flow of blog posts and livestreaming analysis, making himself indispensable as one of Trump's most appreciative interpreters. He made the case that even the most erratic Trump moments were tactically brilliant—and that this was an insight that he alone could see. "My predictions are based on my unique view into Trump's toolbox of persuasion," Adams wrote at the outset, reminding readers that he was a certified hypnotist. "I believe those tools are invisible to almost everyone but trained hypnotists and people that study the science of persuasion." As Trump kept winning, Adams was invited onto CNN, BBC, HBO, and other platforms. He amassed 140,000 Twitter followers, and on some days his blog readership spiked to almost 450,000.

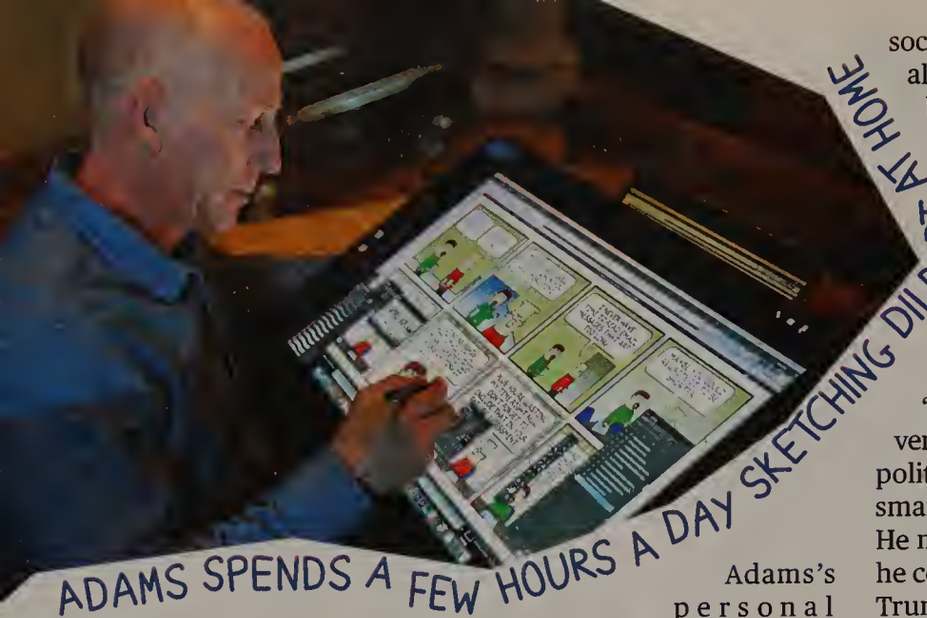
Through most of the primary season, Adams emphasized that he wasn't endorsing Trump, just doing his part to help the public better read a misunderstood candidate. When Trump insulted Carly Fiorina—saying "Look at that face!"—Adams declared it a "linguistic kill shot" that would end her bid. "She does have what I call the angry wife face when she talks politics," he wrote. "Guys, you know that face." When Trump referred to Mexican immigrants as "rapists," Adams said he obviously hadn't meant *all* Mexican immigrants, only some—and that "intentional exaggeration is a ... standard method of persuasion." When Trump called for a ban on Muslim immigrants, Adams wrote: "In the 3D world of emotion, where Trump exclusively plays, he has set the world up for the most clever persuasion you will ever see." He dubbed Trump's technique "pacing and leading": He was getting the attention of anti-immigration crusaders, before scaling back to a more moderate stance. When Trump asserted that things were worse for African-Americans in 2016 than at any time in history—prompting many to remind Trump about slavery—Adams wrote, "Facts don't matter. Every trained persuader knows that." In June, Adams spoof-endorsed Hillary Clinton, writing that if he didn't, he would become "a top-ten assassination target." Clinton fans define Trump as Hitler, he reasoned, "and obviously it would be okay to kill anyone who actively supports a genocidal dictator." Adams later emphasized that he wasn't joking.

Getting a comic strip, even one as occasionally edgy as *Dilbert*, into family newspapers requires observing a certain set of norms. Adams's viral analyses of Trump introduced many people, including me, to his more unusual fixations. Between political ponderings, he blogged about fitness and seduction, posting photos of his abs and writing a series of essays on how to deploy hypnosis and persuasion for better orgasms. "My language skills activate your sex drive, and you know it," he wrote at one point. So-called men's rights activists became vocal fans. I was just baffled. As Trump and Clinton entered the home stretch of the campaign, I wondered if *Dilbert*'s success had made Scott Adams eccentric—or if this had always been the mind behind the strip.

One week before the election, I went to meet Adams at his sprawling, self-designed home in Pleasanton, Calif., about an hour's drive southeast from San Francisco. When he opened the door, accompanied by his dog, Snickers, he turned out to be soft-spoken and friendly. At almost 60, Adams conveyed the energy of a teenage boy. Short and wiry, with thinning, close-cropped hair, he wore glasses, jeans, a V-neck T-shirt, and black Ecco sneakers. After offering me coffee, he opened a can of coconut water and sat on a tall stool at the island in his kitchen. "If Trump gets elected, my profile will go through the roof, because I'm in a very small group of people who publicly said he would win in a landslide. ... I'll be very popular," he said, with satisfaction.

Adams's house is a shrine to the cartoon character that made him rich. One section, visible from the pool area outside, clearly resembles Dilbert's head, with two oval windows for eyes, connected by a thin line that suggests spectacles. "They look out from the cat's bathroom upstairs," Adams told me. The structure is full of indulgent quirks. In the kitchen, Adams installed three microwaves so he "can make a lot of popcorn at once." Nearby, he transformed a bar area (Adams doesn't drink) into a display case for *Dilbert* books and paraphernalia. Other features include a 10-seat movie theater, a gym, and a room filled with beauty salon equipment, where his ex-wife (now

BY CAROLINE WINTER PHOTOGRAPHS BY JEFF MINTON



ADAMS SPENDS A FEW HOURS A DAY SKETCHING DILBERT AT HOME

Adams's personal assistant) used to host spa days for friends. Off to the back is an indoor tennis court.

Adams's *Dilbert* empire has been growing for three decades. When he launched the strip in the late '80s, long-running staples such as *Dennis the Menace*, *Family Circus*, and *Blondie* seemed saccharine and dated. Adams's creation was fresh, starring a sardonic software engineer named Dilbert; his conceited and grandiose dog, Dogbert; an incompetent boss; and a host of odd co-workers. Early installments showed Dilbert at home. When Adams refocused the strip on the workplace, it caught fire among a generation of office drones who spent their days staring at spreadsheets and slide decks. While workers had long tacked comics like *The Far Side* and *Cathy* to their felt cubicle walls, to say something about themselves and their brand of humor, here was a subversive comic about cubicle culture itself. During the '90s, amid waves of corporate downsizing and the tech boom, a zeitgeisty Dilbert graced the covers of *Newsweek*, *Time*, and *Fortune*. Adams churned out *Dilbert*-themed calendars, knickknacks, and even a TV show. He also penned op-eds and business tomes, including *The Dilbert Principle*, based on the theory that companies tend to promote their least competent employees to middle management, "removing morons from the productive flow."

Adams still spends two to four hours most days sketching strips at home, with some help from a remote assistant who perfects the details. He has an airy office upstairs, where the books on display include *Pre-Suasion: A Revolutionary Way to Influence and Persuade* and a signed copy of *The Game: Penetrating the Secret Society of Pickup Artists*, a book of strategies for seducing women. (Adams said he hadn't read it.) But Adams usually works downstairs, at a large digital sketchboard in his living room, surrounded by vases filled with fake flowers, facing a faux fireplace and an enormous flatscreen TV. "That way I can watch the news," he said, adding that he doesn't generally read newspapers, except for links people send him.

When I visited, Adams's girlfriend of three months, Kristina Basham, was living with him, along with her two daughters. She's 28. Until recently, she maintained a website that showed her posing in a bikini, described as a model and baker, with a D cup size. "I don't talk about where we met. People make judgments," Adams said. "We met the normal way people meet." He does blog about Basham, though. In a post titled "The Kristina Talent Stack," Adams described how she increased her Instagram following to 2.5 million. "The idea of a talent stack is that you can combine ordinary skills until you have enough of the right kind to be extraordinary," he wrote. "You don't have to be the best in the world at any one thing. All you need to succeed is to be good at a number of skills that fit well together." Basham, he noted, was smart, knew model tricks about posing and makeup, and used social media hacks such as SEO and A/B testing. ("For example, although her Instagram photos are G-rated, any hint of sideboob adds at least 10% to her engagement.") This seemed a little obvious to me, but Adams also extended the theory to himself and Trump.

"I'm not much of an artist, not much of a business expert, and my writing skills are mostly self-taught," Adams wrote. "I'm funny, but not the funniest person in my town. The reason I can succeed without any world-class skills is that my talent stack is so well-designed." Trump's stack, he continued, was powerful. "He isn't the best communicator in the world, but he is very good. He doesn't know as much about politics as career politicians do, but apparently he knows enough. He isn't the smartest person who ever ran for office, but he's very smart. He might not be the best business strategist in the world, but he certainly knows his stuff. I could go on for pages about how Trump has good-but-not-world-class skills in a variety of areas. And when you put all of those talents together it makes him the most persuasive human I have ever observed."

Basham had recently persuaded Adams to take a trip to London and Zurich—the first time he'd ever traveled beyond Canada and Mexico. "I don't like being uncomfortable," he said, "and travel is uncomfortable." He prefers to stay home, keeping busy with various entrepreneurial projects. He was especially eager to talk about WhenHub, an online platform for sharing schedules and timelines, in which he said he's invested roughly $1 million and where Basham is a vice president. To demonstrate the product, he showed me a timeline he'd made featuring Victoria's Secret models. We looked at the lingerie-clad figures on a screen together. "I don't know how you get a stomach like that, except through lots of situps and not eating," he said, admiring one of the women. Later, at lunch, Adams ate only a few bites of a salmon nicoise salad, saying he needed to counteract an unhealthy diet during his travels.

As a child, Adams lived in the town of Windham, N.Y., with two siblings. "I'd say we grew up in a family where no one ever hugged," he said. "So, not close in the way people talk about, but close as in, yeah, we'd take a bullet for each other." His father was a post office clerk, while his mother worked first as a real estate agent and then on an assembly line at a speaker factory. "Her job was to manually wrap copper wire around magnets, which she did for eight hours a day," Adams said. "It was awful. She did that to pay for our college." His mom also got him interested in hypnosis. "She gave birth to my younger sister while under hypnosis," Adams told me. "She was awake and remembers the experience but didn't feel any pain. That influenced me greatly." (Dave Adams, Scott's brother, told me he also believed this story.)

After graduating as valedictorian of his 40-person high school class, Adams enrolled at Hartwick College in central New York, which he said he chose largely because it had a nursing school and thus more women than men, and got a bachelor's degree in economics. Sick of the cold, he moved to San Francisco, where he landed a job as a teller at Crocker National Bank and worked his way into management. Later he worked at Pacific Bell and took night classes to earn an MBA from the University of California at Berkeley. At both the bank and the phone company, Adams has said, his professional advancement was thwarted by diversity hires. "There was no hope for another generic white male to get promoted any time soon," he wrote in *Dilbert 2.0: 20 Years of Dilbert*. (Later in the book, he noted that his *Dilbert* TV show was canceled after "the network made a strategic decision to focus on shows with African-American actors.")

Inspiration for *Dilbert* came from his cynical view of corporate life. "About 60 percent of my job at Pacific Bell involved trying to look busy," he wrote in his most recent book, *How to Fail at Almost Everything and Still Win Big*. "Most of my budget spreadsheets had formula errors, but that didn't matter because all of the inputs from the various departments were complete lies and bullshit. If anything, my error probably smoothed out some of the bullshit and made it closer to truth." While working for Pacific Bell, Adams set his alarm for 4 a.m. most days and spent a few hours sketching *Dilbert* and writing, 15 times in a row, an affirmation: "I, Scott Adams, will become a famous cartoonist." His breakthrough came when United Media began syndicating *Dilbert* in 1989.

Starting in the late '90s, Adams also launched a line of vitamin-infused vegan microwave burritos called Dilberitos, which were discontinued after a few years, and two restaurants, which went belly-up. "For a while, everything I touched turned to gold," Adams said. "So I tried harder things, until I found my limit. The restaurants were my limit." He also wrote two religion-themed novellas, published in 2001 and 2004, which, he told me, will be his ultimate legacy—not *Dilbert*.

The first, *God's Debris*, is about a package delivery guy who meets the smartest man on earth. "The central character in *God's Debris* knows everything. Literally everything," Adams writes in the introduction. "This presented a challenge to me as a writer. When you consider all of the things that can be known, I don't know much. My solution was to create smart-sounding answers using the skeptic's creed: The simplest explanation is usually right." The second novella, a follow-up titled *The Religion War*, describes a civilizational conflict in 2040 between a violent caliphate in the Middle East and a Christian alliance in the West. The hard-nosed hero builds a wall around the jihadists and "essentially kills everybody there," Adams told me. "I have to be careful, because I'm talking about something pretty close to genocide, so I'm not saying I prefer it, I'm saying I predict it."

Around the same time, Adams said, he was making up to $1 million annually from public speaking, charging up to $100,000 per speech, until in 2005 he suddenly lost the ability to talk with other people. The mysterious condition is known as voice dystonia. While Adams could still speak normally to himself and to his cat, and he could even sing and recite memorized poems, he could no longer have conversations. "I think that's what led to the end of my marriage," he told me. "Losing the ability to speak made me feel like a ghost. It was incredibly lonely." The inexplicable condition, which doctors attributed to a possible mental condition, persisted for three years. Then Adams underwent an experimental surgery that involved cutting nerves that lead from the brain to the vocal cords and building a new path using nerves from elsewhere in the neck. A few months later, his voice returned.

When Adams began writing about Trump, it surprised his friends and colleagues, who'd always considered him to be liberal on social issues. "When he told me about Trump, I was so disappointed, because I respect the guy so much," says Stephan Pastis, the creator of *Pearls Before Swine*, who credits Adams with discovering his strip and making it popular. "I definitely get asked by other syndicated cartoonists—and the questions are not good—'What's happening to him? Why's he supporting Trump?'" One explanation, Pastis says, is that Adams simply craves attention. "Cartoonists are addicted to reaction. I don't know whether Scott would admit that, but I know it's true."

While Adams eventually endorsed Trump, he told me he didn't vote because he feels he doesn't know enough about international affairs, economics, or science. Still, he views his blog as an act of service. "I'm at a point where I'm trying to be more useful than selfish," he said. "I decided to gamble with my own income and my own reputation to let people see Trump through a different framework, if not a more accurate frame." One consequence, Adams said, is that his paid speaking requests have dried up. "In 20 years, there's never been a week I didn't get a speaking request—and now it's been months," he said.

But Adams is getting a book deal. In October, Portfolio will release *Win Bigly: Persuasion in a World Where Facts Don't Matter*, in which the publisher says Adams will reveal "the secret tricks of the world's greatest persuaders, giving readers what he calls 'access to the admin passwords for human beings.'" Dogbert appears on the cover, wearing a Trump-like blond coif.

In a sense, Trump has been a part of *Dilbert* almost since the beginning. In 1990, Adams published a strip in which Dogbert is introduced to a Soviet dog named Nikita Dorgachev, who's traveled to the U.S. to learn about capitalism. "And your god is Donald Trump?" asks Dorgachev. Dogbert replies, "I don't think it's official yet."

Trump has eerie parallels to Dogbert, who consistently gets ahead at everyone else's expense. In the '90s, Dogbert published a fake-news-filled tabloid dedicated to denouncing enemies and promoting lies about himself. He also advised an audience to eliminate guilt by blaming all problems on "invisible people named Juan and Cindy," adding, "All you have to do is find them and kill them." In more recent panels, Dogbert appears as a negotiation expert who charges Dilbert's boss $1 million for five minutes of his time, then tells him, "We're out of time, unless you want to renegotiate." Adams allowed that the two have one similarity. "They're both kind of megalomaniacal," he said.

I'd thought the point of those strips was to laugh at Dogbert's cruelty—not celebrate it. But Adams seemed elated by the triumph of a Dogbertesque president. "I'm probably feeling more optimistic for the country than I ever have," he said by phone, when we spoke on the eve of Trump's inauguration, amid reports of Russian meddling in the election and a chaotic transition. "I know that's surprising, but the stock market is up, consumer sentiment is up.... It's an impressive new management style that, as far as I can tell, is working."

In a February post, Adams admitted that Trump's first month might look to some like "incompetence" or "chaos," but he noted that others would say the president was simply "draining the swamp and learning on the job." Much of the world was feeling less sanguine. Less than 100 days into his administration, one view of Trump is that he's the ultimate, dystopian version of a *Dilbert* joke gone horribly wrong: an unqualified, bigoted, greedy, dangerous, and blustering boss promoted to the world's most powerful job. But Adams would say such people are just living in a different reality—a different "movie," as he put it, the last time we spoke.

He later expanded on the analogy in a blog post. "I feel sorry for the people watching the other movie—the one in which President Trump is essentially Hitler," Adams wrote. "In my movie, he's having a bumpy transition ride but generally doing the people's work. My movie is more of a comedy." The cartoonist, at least, was having a laugh. B

ADAMS'S GIRLFRIEND KRISTINA BASHAM, 28

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HEELS
FIT FOR A MUSEUM
HOW TO PREVENT BURNOUT
THE NONVILLAIN OF LIBOR
DIET
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ETC

Chef-spector Gadget

Philip Preston's inventions have already remade restaurant kitchens. Now they're coming for yours

By Matthew Kronsberg
Photographs by Ryan Lowry

Philip Preston is standing against a wall in the kitchen at the Aviary cocktail lounge in Chicago's West Loop. Around him, the restaurant's black-clad drinkmakers work with quiet intensity beneath operating-theater-bright lights, creating some of the country's most innovative cocktails. A waiter rushes past, ferrying the In the Rocks, which appears to be nothing more than an orb of ice the size of a small fist nestled in a tumbler. With the drink, however, comes a slingshot designed to fit snugly over the rim of the glass. When a drinker snaps the elastic down against the sphere, the ice cracks and releases the cocktail held within, transforming the drink from In the Rocks to on the rocks.

Aviary's general manager, Jeremiah Beckley, introduces Preston, 60, to the staff, who receive him with the deference typically granted a visiting dignitary. "It's Hollywood light in the culinary world," Preston says, laughing at the fuss being made. Dressed in khakis and a checked oxford shirt, pen in his breast pocket and phone in a holster attached to his belt, Preston has nothing Hollywood about him. And though he's not a chef or critic, his fingerprints are on almost everything that leaves the kitchen here. It's his lab-grade chillers that form the hollow frozen orbs at -17C (1.4F) and hold the drink separately at -15C, so it can be injected into the ice to order without melting everything before it reaches the table.

Preston is the president of PolyScience, a Chicago-area maker of precision temperature-control systems for industrial, laboratory, and medical equipment. About a dozen years ago, the company developed a subspecialty in innovative kitchen gear, beginning with the now ubiquitous immersion circulator. If you've been served a beef short rib that was spoon-tender but somehow still pink inside from edge to edge, or seen an egg dish on a brunch menu denoted by its cooking temperature (usually 63C), it was probably cooked with a PolyScience product. The technique is called *sous vide*, French for "under vacuum." Ingredients are typically sealed in plastic bags and submerged in water, which the immersion circulator keeps heated to a precise temperature. As a result, overcooking is next to impossible. Set a steak to cook at a medium-rare 132F, and it will stay that way, even if you fall asleep while it's cooking. Once employed almost exclusively in restaurants in France, immersion circulators can now be found in just about any moderately ambitious restaurant in America.

The mania in the U.S. originated in 2005, when chef Matthias Merges reached out to Preston about acquiring one of the devices for Chicago's Charlie Trotter, where Merges was then chef de cuisine. He was eager to experiment with sous vide, and Preston, an avid cook himself, gave him a few circulators for free. News travels quickly among elite chefs, and by the next year, Wylie Dufresne of New York's (now closed) WD-50 was using PolyScience immersion circulators on an episode of the Food Network's competitive-cooking show *Iron Chef America*. Demand grew exponentially from there, helped along by a vogue for sous vide cooking on the reality show *Top Chef*. To accommodate the increasing number of orders, PolyScience spun off a dedicated culinary division in 2010, which grew from about $500,000 in sales the first year to $8.5 million four years later. If you're a curious home cook, you now have your choice of immersion circulators on Amazon.com, some of which go for as little as $70.

Preston, like many of the chefs who count him as a friend, is a relentless tinkerer and perfectionist—think Willy Wonka crossed with Bill Nye the Science Guy. He does most of his experimenting at his suburban Chicago home, in what he calls the Garage Mahal, a barnlike space that also holds his collection of meticulously restored cars and motorcycles, including a 1970 Ford Bronco and a 1964 Cadillac Eldorado. PolyScience Culinary prototypes and products are scattered around the room. A rotary evaporator, for instance, which distills at low temperatures and helps preserve delicate flavors and aromas, is at work on some apple eau de vie. "I was distilling some hard cider that I made," Preston says, "and I thought, Well, I need to barrel-age it for three years to get good calvados," a French apple brandy. Instead, he fills a plastic tub with the distillate, drops in a fistful of oak chips, and sets it on a shelf in the soundproof cabinet of a

A PolyScience rotary vacuum evaporation system

The professional version of the Smoking Gun

PolyScience Sonicprep, which uses high-powered ultrasonic waves to agitate and homogenize fluids. He inserts a wand into the liquid through a hole in the top of the cabinet, closes the door, and turns a knob. Behind an oval-shaped window, the oak shavings vibrate and blur, and the clear liquid turns amber, mimicking the absorption and expulsion cycle that happens in barrel aging. Moments later, there's rough-and-ready calvados.

Preston's father founded PolyScience in 1963 as an importer of scientific equipment. Gradually the company morphed into a manufacturer, and its laboratory business still accounted for about 80 percent of revenue, or about $38 million, in 2014. Preston took over the company in 1982, and before the sous vide moment, PolyScience's greatest brush with notoriety was during the O.J. Simpson trial, when it developed the thermal cycling technology used in the DNA analysis of the infamous leather glove.

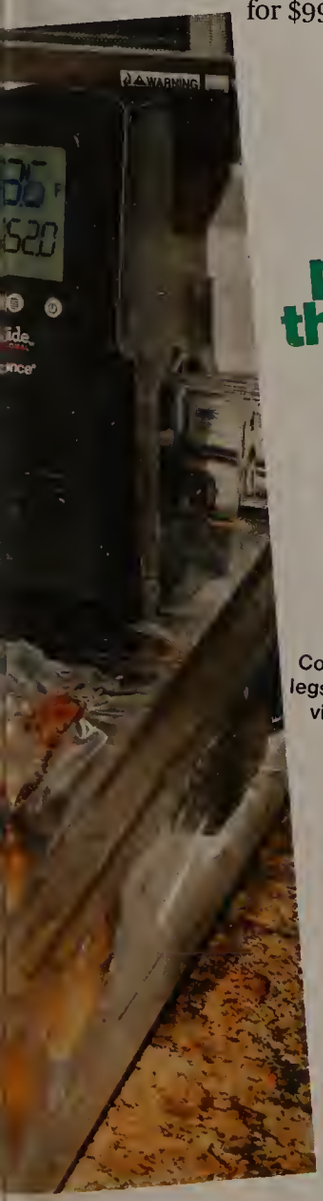
Australian appliance behemoth Breville Group Ltd. acquired PolyScience Culinary in 2014, and it wants to make their products as omnipresent in home kitchens as they are in professional ones. PolyScience's first consumer product co-branded with Breville is called the Smoking Gun, designed to infuse foods quickly and easily with a nice wood-char flavor. It works and operates like a small blow-dryer, albeit one in which you'd light wood chips on fire, and you can find it at Crate & Barrel for $99.95. PolyScience's classic model sous vide circulator, the one Preston gave Merges back in the day, goes for $1,200, but an at-home version can now be had at Sur La Table for $399.95. That puts it at the high end of a suddenly crowded market. PolyScience's best known rival is probably Anova Applied Electronics Inc., which started as a $1.8 million Kickstarter project in 2013 and was recently acquired by Electrolux AB in a deal valued at up to $250 million.

If all Breville had wanted was to get into the home sous vide market, it could have developed a circulator in-house. What it got in PolyScience Culinary, says Breville USA President Damian Court, was a lucrative pathway into commercial kitchens. Chefs are tremendously loyal to the PolyScience brand–its Instagram account features an image of pastry chef Luis Villavelazquez, of San Francisco's Les Elements Patisserie, displaying a "sous vide PolyScience" bicep tattoo. Having a direct line to chefs who are "pioneering new techniques that might have started out considered niche or eccentric," Court says, can have benefits when, "years later, we're looking at all of the trends to see what will be of interest to a consumer."

Arguably no chef has worked more closely with Preston to pioneer those techniques and equipment than Grant Achatz, co-founder of the Alinea Group, which runs both the Aviary and the experimental cuisine pilgrimage site Alinea. The pair first worked together in 2005 on the Anti-Griddle, an ultra-chilled surface that will freeze anything (say, crème anglaise) almost instantly (bam–it's ice cream). PolyScience products are all over the Aviary kitchen. At one station, a plume of spice-scented smoke wafts from a Smoking Gun loaded with allspice berries. At another, a chef pulls great alabaster sheaves of *chicharrón*, aka crackling fried pork skin, from pots of oil set on Control Freak induction cookers, which are capable of regulating their own temperatures down to the degree. With a price tag of $1,799.95, the cooker is aimed predominantly at the professional market, and yet its appeal to the home cook is apparent: Imagine being able to set a pan for "never-burn pancakes" or to treat a pot as a hyperaccurate slow cooker.

Achatz describes Preston as a kindred spirit. "At one point I asked him, 'Philip, how do we make snow that tastes like pomegranate?'" Achatz laughs when he hears Preston is still working on it; one idea he had was to build a tall Plexiglas cylinder into which he blasts CO_2 chilled to -109C. "I kid you not, it was 11 years ago when we first started talking about that," Achatz says. "He'll definitely figure it out. He doesn't want to fail." Even now, Preston is doing all the prototyping himself in his garage. "I can't go to my team of engineers and say, 'Hey, guys, let's make snow!'" he says back at home. "The goofy stuff has to happen here." B

Preston is a relentless tinkerer and perfectionist—think Willy Wonka crossed with Bill Nye the Science Guy



Confit duck legs in a sous vide bath

Preston makes rosemary crème anglaise pops on the Anti-Griddle

ALONG CAME A SCAPEGOAT

David Enrich's The Spider Network *makes Libor mastermind Tom Hayes seem borderline sympathetic. By Nick Summers*

For anyone burning to see financial wrongdoers put behind bars, Tom Hayes might seem like an ideal white-collar villain. As a superstar derivatives trader at a series of investment banks in London and Tokyo, Hayes masterminded a conspiracy to manipulate a benchmark interest rate that underlies hundreds of trillions of dollars' worth of loans. British prosecutors—armed with gigabytes of evidence showing Hayes caught in the act, plus his own taped confessions—put him on trial in 2015; he's now serving an 11-year sentence. It was an epic downfall, and David Enrich, an editor at the *Wall Street Journal*, recounts it well in *The Spider Network: The Wild Story of a Math Genius, a Gang of Backstabbing Bankers, and One of the Greatest Scams in Financial History* (HarperCollins, $29.99). One thing readers won't get out of this exhaustively reported tale, however, is schadenfreude.

In Enrich's telling, Hayes is more of a pitiable figure than a master fiend. He certainly never looked the part of a smooth operator: Carelessly dressed and shabbily groomed, Hayes had difficulty interacting with people, preferring the cold logic of spreadsheets. He didn't party or jet-set like a typical overpaid banker, opting for juice or hot chocolate on the occasions he was forced to socialize outside of work. More substantially, Hayes wasn't a top executive, and when he acted to rig the interest rate in question—the London interbank offered rate, aka Libor—he often did so with the knowledge of his bosses. The reason Hayes is in jail and his superiors aren't seems to have more to do with his personality, and maybe his mild case of autism, than the severity of his crimes.

Don't get me wrong—as Enrich makes clear, those crimes were pretty severe. Libor is a set of numbers, published every business day, that reflects what London banks charge each other to borrow money. A handy barometer of risk, it's baked into a vast range of financial instruments, including complicated derivatives contracts as well as more mundane mortgages, car loans, and credit cards. Hayes colluded to nudge Libor higher or lower to benefit his trading positions; when he did, he made ordinary people's interest payments go up and deprived municipalities and businesses of income. What sticks in the mind after reading *The Spider Network* is not that Hayes doesn't belong in jail, but that he deserves a lot of company.

Enrich opens his book with an annotated cast of 80 characters from 16 organizations. It's overwhelming, but it's necessary to demonstrate just how many people were involved in the Libor scheme, which went on for longer than a decade and was a more-than-open secret. Enrich describes it as a "systemic racket." It was common for traders at banks in London and other financial capitals to give hints, if not explicit instructions, to colleagues in charge of managing Libor. The industry's meek self-monitor, the British Bankers' Association, ignored all signs that the benchmark was skewed on the regular. When the 2008 financial crisis hit and a few academics, journalists, and regulators at the U.S. Commodity Futures Trading Commission caught on, the banks were so obviously guilty of abusing Libor that one of them, UBS Group AG, decided the best way to wind up with a survivable penalty was to offer to the government its most prominent offender: Hayes. (He also distorted Libor at Citigroup Inc., where he worked from 2009 to 2010.)

Why was he singled out? Few people were better at reading numbers than Hayes, whom Enrich describes as "by all accounts one of the best at his craft on the planet," but it's hard to imagine anyone reading people much worse. Never a popular guy on the trading floor, he earned nicknames such as Rain Man and Kid Asperger—armchair diagnoses of a condition that a psychologist would confirm at Hayes's trial. Hayes missed social cues that might have led him to temper his Libor manipulation, making it no more detectable than anyone else's. But he was so unpleasant to deal with—he abused underlings and avoided videoconferencing software because he disliked eye contact—that he conducted most of his work over instant message, creating a damning trove of evidence.

Ultimately, Hayes botched his interactions with U.S. and U.K. regulators as they closed in. He copped to his role in the conspiracy and then entered a plea of not guilty, incapable of understanding who his allies and enemies were. Even then, the jury needed a week to deliberate Hayes's guilt. He wasn't the perfect banker to punish. He was just the one they were given. B

Nicholas Kirkwood Zaha sandals
$1,150; farfetch.com
Alexander Wang Gabi booties with rose-gold metal heels
$775; alexanderwang.com
Acne Studios Althea leather ankle boots
$800; net-a-porter.com
Gray Matters Mildred Classic
$475; graymattersnyc.com
Cos slingback bow pumps
$190; cosstores.com
Paul Andrew Imari leather slingback pumps
$945; net-a-porter.com
Saint Laurent by Anthony Vaccarello Opyum pumps
$995; Saint Laurent, 3 E. 57th St., New York
J.W. Anderson gold cylinder heel ballet shoes
$1,050; j-w-anderson.com

FANCY FOOTWORK

Sculptural heels turn your outfit into a work of art. By Dora Fung

If you want your shoes to be the star of your look, think sleek with long lines to draw attention to your feet. On the other hand, you could go maximalist and mix in other colors and textures. Don't be afraid—more is more!

FEEL THE BURNOUT

Work getting to be a drag? It's not just you
By Kayleen Schaefer

WHAT IS IT?

In the 1970s, New York psychologist Herbert Freudenberger felt overworked, but also like he wasn't accomplishing anything–a confusing combination. After some expert self-analysis, he determined that he wasn't suffering simply from exhaustion or depression. Rather, he identified a new condition, which he termed burnout, after the listless drug addicts he treated who'd watch their cigarettes burn down instead of smoking them. He wrote a book on his discovery in 1980–*Burnout: The High Cost of High Achievement*–but the term didn't really catch on until the paperback came out in 1989, when he was interviewed by both Oprah Winfrey and Phil Donahue.

Today burnout is a widely accepted idea, though it hasn't made it into the *Diagnostic and Statistical Manual of Mental Disorders*, aka the bible for mental health professionals. "'Burnout' is such a catchy word, so I can understand why a lot of people say it's pop psychology," says Christina Maslach, a professor of psychology at the University of California at Berkeley. That said, not being in the *DSM* has its advantages. "For a lot of us in the field, to reduce it to 'there's something wrong with the person' isn't seeing the bigger picture," says Maslach, who developed a widely used diagnostic inventory for the condition.

To really treat burnout, she says, you have to address what's going on in your head *and* at the office.

ARE YOU SUFFERING FROM IT?

According to Maslach, burnout results from three factors: exhaustion, cynicism, and low professional efficacy–the feeling that nothing you do matters.

• If you don't feel like you have any control over how you do your work...

• You're not getting positive feedback when you do something well...

• And/or you don't trust or respect the team you work with on a regular basis...

• You believe certain policies at work are unfair...

• You feel uncomfortable telling people what you do because it goes against your values...

... then you may have a touch of burnout.

41%

of U.S. workers said they'd felt burned out at work in the preceding 30 days, according to a 2014 Gallup survey

HOW TO TELL HR YOU HAVE IT

Let Steve Browne, executive director of human resources for Cincinnati-based pizza chain LaRosa's and a speaker on human-resources-related issues, help you role-play.

The Opening
Schedule the talk before or after work or during lunch, Browne says–not while you should be working.
"I'd like to talk about how things are going at work."*
"OK."
*Whatever you do, don't say, "Hey, I'm burned out."
"My manager doesn't give me direction."
"I think I have more to offer, but my boss is holding me back."
"I don't have any challenging work."
"Tell me what's contributing to that."
The Pitch
At this point, if you want to keep your job, you should have a solution at hand: "You want to say, 'This is the situation, and this is what I'm thinking,'" Browne says. "That's a much better conversation than, 'Everything is messed up.'"
Solution A
"I want to feel like I'm in charge of the way I present X project."
"Great. I think you should work with Fred McMentor on this. Why don't you meet with him for 20 minutes every Monday and Friday?"
Solution B
"I need a week off to clear my head."
"If you need to take a mental break, that's OK, but at the end of the week you need to be prepared with what you want to do."
The Closer
You and your HR rep should both be satisfied with the plan you develop and ready to give it an honest chance. If that doesn't work, Browne says, start thinking about whether this is really the right job for you.

24% of workers surveyed by CareerBuilder in 2016 said they'd called in sick in the past year because they just needed to relax

MANAGERS: STOP IT BEFORE IT STARTS

Mandatory group work. Every week, the California-based product design company Zurb Inc. hosts the "Friday15," bringing employees together to solve a creative challenge in 15 minutes. They might design a company logo or play a quick game of capture the flag–the idea is to build up a feeling of trust and teamwork, but it also helps people blow off steam after a long week.

Communication blackouts. Whenever an employee at Bandwidth.com Inc., a communications-technology company in Raleigh, N.C., goes on vacation, the entire staff is notified, so they'll avoid bugging the vacationer with email while they're away. That way, the employee gets an actual vacation and isn't tempted to check in.

The American Institute of Stress estimated that work-related stress in 2014 cost U.S. businesses

$300 BILLION

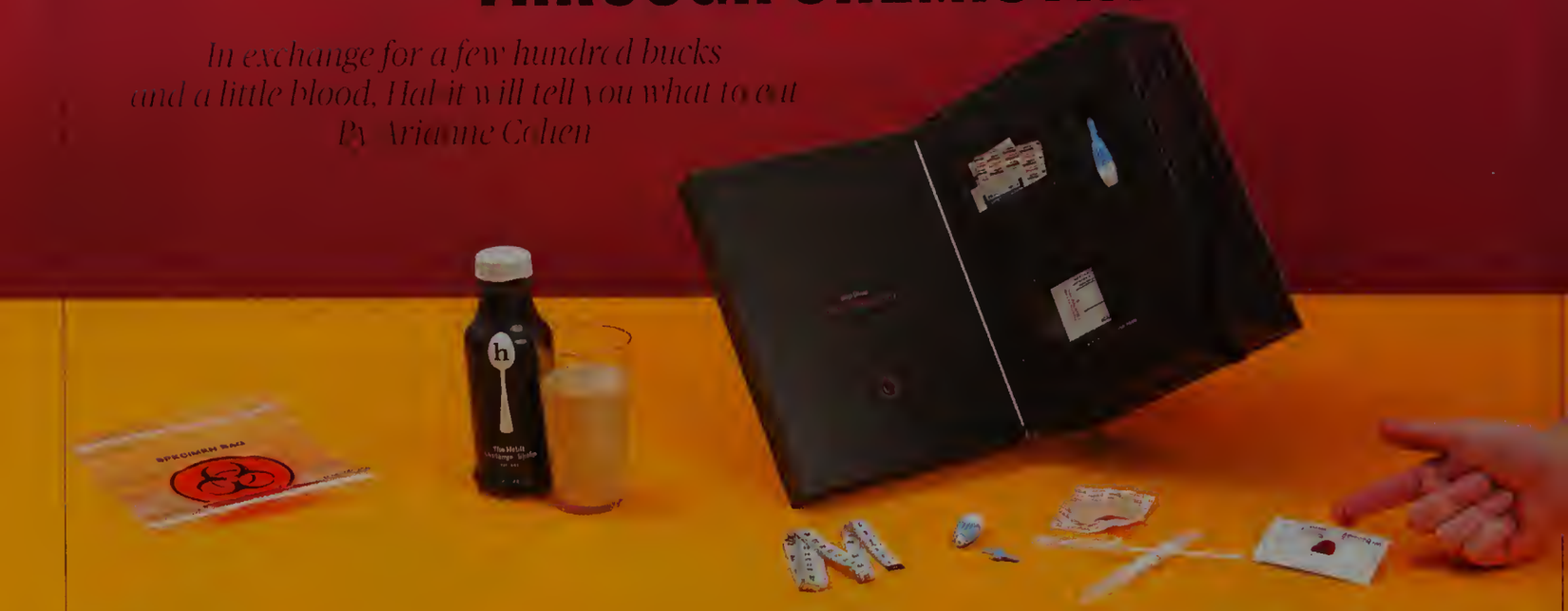
Time for your own projects. Many places go beyond Google Inc.'s famous 20 percent time policy, which allowed employees to work on projects not directly related to their job. (Google killed the policy in 2013.) The Brooklyn ad agency Huge, for instance, holds regular hackathons for employees with a panel of judges who pick the most promising idea. Winners get funding and office space for their projects–and Huge gets an ownership stake.

Sponsored pampering. Johnson & Johnson recently started the Premier Executive Leadership Program, a nine-month, $100,000 plan to stave off burnout among the muckety-mucks at J&J and other companies. Participants are assigned an executive coach, a nutritionist, and a physiologist who work together to make sure the executive stays in top form.

BETTER DIETING THROUGH CHEMISTRY

In exchange for a few hundred bucks and a little blood, Habit will tell you what to eat

By Arianne Cohen



First, the shake: At 950 calories, 61 grams of fat, 20g of protein, and 75g of sugars in just 14 ounces of fluid, it's the centerpiece of the starter kit for Habit LLC, a new individualized nutrition company. It's also a beast. Even tackling it after a 10-hour fast, as instructed, I have a hard time getting it all down.

Joshua Anthony, founding chief science officer at Habit and one of the shake's architects, urges me to persevere. "It's a lot of shake, because it's designed to be a food challenge," he says. "Your body has to respond to the overload—the whole process of digestion, absorption, and distribution of those nutrients. How your body manages that gives us important insights about how your body is functioning today."

Habit aims to be the 23andMe of your metabolism. After I finish the shake, I take samples of my blood periodically over the next two hours and send them back to Habit headquarters in San Francisco, along with three swabs of DNA from the inside of my cheek. Within four weeks, I'll receive a personalized nutrition plan based on my body chemistry and have a coaching session by phone with a dietitian, all for $299. Three additional coaching sessions can be had for $150.

The company was started by Neil Grimmer, co-founder and chairman of Plum Organics, which makes those now ubiquitous baby food pouches. A former triathlete, he developed "CEO disease" during his eight years at the helm of Plum, he says, gaining 50 pounds from "too much coffee and not enough healthy food." In 2013, shortly after Campbell Soup Co. acquired Plum, he shed the weight with the help of individualized attention from scientists and doctors he'd worked with at the company. This, it occurred to him, might be something others would be interested in.

"When you create a highly personalized business model," he says, "you can start to wrap additional products and services around it catering to the individual"—say, a meal delivery service, which Habit operates in the Bay Area; a nationwide rollout to major metropolitan areas is planned for the next few months. (The company is currently limiting the shipping of its test kits to the Bay Area; sign up at Habit's website to be notified when it starts shipping to your city.)

The personalized nutrition market is particularly ripe right now, says Marion Nestle, a molecular biologist and professor of nutrition and food studies at New York University—although most academics are dubious. "All these venture capital companies are just dying to get involved in some sort of food enterprise, because diet is hard for people, and there are people who will love this," she says. Campbell's certainly thinks so: It's backing Habit to the tune of $32 million.

When my results arrive, I find that Habit has deemed me a "protein seeker," in need of a 35 percent protein diet. I share this with Nestle, who expresses some skepticism. Average protein intake, she says, is about 15 percent, and it's hard to get higher than that without supplements. Habit doesn't disclose the algorithm it uses to make its analyses, nor has it published any peer-reviewed research on the efficacy of its dietary prescriptions, so it's not clear which of the 60 biometric markers the company tests for triggered the advice. I ask Nestle if Habit's diet recommendations are trustworthy. "They might be, but how would you know?" she says with a sigh. "I'm sure it's based on something."

Anthony says that as the size of Habit's data sets increases, the company will begin to publish research, beginning with a paper he's planning to present at the Experimental Biology conference in April about nutritional shake composition. (I could provide some customer input.) Transparency, he says, is "super important to us." Perhaps the current lack thereof is just a little growing pain. B

JOAN INSEL
52, vice president, CallisonRTKL Inc., Seattle
EMILIO PUCCI
Tell me about your jacket.
I found it online. It has these cool embellishments that help me stand out—I don't want to wear what other people are wearing.
Do you wear it indoors?
Yeah, it's lightweight enough. The air conditioning can get cold!
What's on the wall behind you?
We're a design firm, so you'll find stuff pinned up on the walls throughout the office. This is our lunchroom, and we'll have collaboration sessions in here.
JAMES PERSE
MARC BY MARC JACOBS
What's the pattern on your pants?
I don't know what it's called, except that it's really cool. It has this midcentury vibe that reminds me of a pair of pants I had when I was a kid.
SWAROVSKI
How do you like to dress for work?
I'm not into business casual. I appreciate stuff from the '50s and '60s. Even if I'm buying something brand-new, I want it to have a vintage feel.
Do you shop vintage?
I enjoy it, but I just don't have time to do it.
They complement your shoes.
The shoes are, No. 1, flat, which is very important. That allows me to rush around when I'm traveling. And they have a platform, so they help me feel a little taller.
SEVEN FOR ALL MANKIND
3.1 PHILLIP LIM
Is that fur on your bag?
It's faux fur. Everyone jokes that I love the furry bags—I'm always petting them.
F-TROUPE

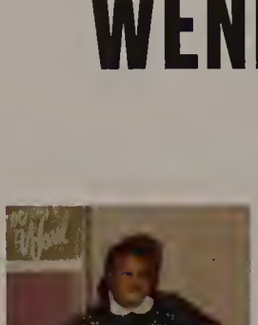
Interview by Jason Chen

How Did I Get Here?

Wendy

WENDY WILLIAMS

Host and executive producer, The Wendy Williams Show



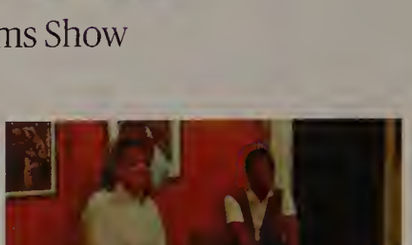
In a charm school fashion show, 1971

"I was a solid C student. Mentally I was every place but at school, and I was one of only four blacks in my graduating class. So I was a bit of an enigma, physically and mentally."

Education

Ocean Township High School, Oakhurst, N.J., class of 1982

Northeastern University, Boston, class of 1986



With her best friend, Regina, 1985

"My college radio station was the first time I ever got on a microphone. News wasn't necessarily up my alley. But when I got with DJing, that's when I knew."

Work Experience

"I would go into the studio with some sort of flair–a sparkly jacket or nails. One day the host goes, 'Our intern, Wendy, is here. Wendy, let me see your nails.... Wait, get on the mic, nobody can hear you.' And I'm like, Perfect, got him!"

1984
Intern, *Matty in the Morning*, KISS 108, Boston

1986–87
Afternoon DJ, WVIS 106.1, St. Croix

1987–88
Afternoon DJ, WOL 1450 AM, Washington, D.C.

1988–90
Overnight DJ, Hot 103.9, New York

1990–94
Morning and night DJ, 98.7 KISS, New York

1994–98
Afternoon drive DJ, Hot 97, New York

1998–2001
Co-host of *Carter, Sanborn, and Wendy*, Power 99, Philadelphia

2001–09
Afternoon drive DJ and host of *The Wendy Williams Experience*, WBLS 107.5, New York

2008–Present
Host and exec producer, *The Wendy Williams Show*

"Hot 103.9 in New York called and said, 'You ready to start weekends?' I drove up and down the turnpike–I know every rest stop from New York to D.C."

With Nina Shay, Reverend Al Sharpton, and Kevin Hunter at the debut of a hip-hop album Williams curated, *Wendy Williams Brings the Heat, Volume 1*, 2005

"I was truly the young and pretty New York City girl having the time of her life, and I wouldn't let anybody knock my focus."

With her son, Kevin, 2000

"I had a plethora of guests–Lisa Rinna and Harry Hamlin and Suzanne Somers and people like that–and at the same time I was fraternizing with Snoop Dogg and Mary J. Blige."

"I knew everything about radio but nothing about TV other than that I liked to watch it. But if you're not going to bet on yourself, who are you going to bet on? We're in 52 countries around the world."

On *The Late Show With Stephen Colbert*, 2017

Life Lessons

1. "Early in your career, say less, listen more, observe everything." **2.** "Internships are the way you learn what you want, particularly seeing the lifestyle that goes with the career." **3.** "Lifestyle is as important as the actual career that you choose."

Courtesy subject (5); Getty Images (3)

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PAUL CHAPMAN
Chief Information Officer, box

ringcentral.com/heroes

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